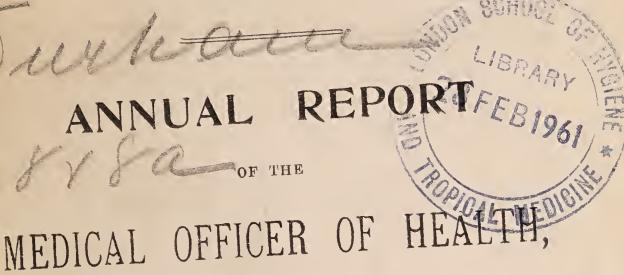


SURGEON GENERAL'S OFFICE

ouncil of the County Palatine of Durham,



EUSTACE HILL, O.B.E, M.A., M.B., B.Sc.,

INCLUDING A

Summary of the Annual Reports of the District Medical Officers of Health,

AND OTHER RECORDS,

FOR THE YEAR 1915.

PRINTED BY THE SUNDERLAND POST CO., LTD., WEST WEAR STREET, SUNDERLAND. 1920



C.0471

Council of the County Palatine of Durham.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH, T. EUSTACE HILL, O.B.E., M.A., M.B., B.Sc.,

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THE COUNCIL OF THE COUNTY PALATINE OF DURHAM.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE,

GENTLEMEN,

I beg to present my Twenty-Fifth Annual Report and regret that it is issued so long after the period under review. This was, however, inevitable owing to the disorganisation of the County Health Department in consequence of the War, almost the whole of the Medical Staff and a large proportion of the clerical staff being away on military service from 1914 to the end of the War. It became necessary for the Deputy and Assistant County Medical Officer to take on the duties of Tuberculosis Medical Officer and in 1915 the Deputy and Chief Assistant School Medical Officer also went on Military service. Since the termination of the War great pressure of work has prevented the completion of this and subsequent annual reports, but I am hopeful that the subsequent reports up to date will be issued this year.

During 1915 very little work for the sanitary improvement of the County was possible. Practically no houses were built and no action could be taken to deal with properties unfit for habitation owing to the fact that there were no other houses available for the tenants. It will be noted from a perusal of this report (pages 27-37) how serious was the housing problem practically in every part of the County, and at the present time the conditions are undoubtedly worse. Some years must elapse before the shortage of houses is overtaken and further additional houses built to accommodate the large population at present living under admittedly unhealthy conditions, and every effort should be made to effect this desired end with the least possible delay. As has been so frequently pointed out, on the solution of the housing question depends the success of our schemes for dealing with Tuberculosis, Infant Mortality and Defective School Children, not to mention other matters materially affecting the public health.

So far as the County of Durham was concerned, the year 1915 was notable for one of the worst epidemics of Measles which the County has experienced, 976 deaths occurring during the first half of the year. This terrible death-rate among our young population resulted in two conferences between the County Council and the District Local Authorities being held at the Shire Hall, Durham, to consider the steps to be taken to prevent a repetition of such an epidemic. At the first Conference, a Committee of the Local Authorities concerned and Medical Officers of Health was appointed

and the following recommendations of that Committee were presented to the second Conference but this Conference did not approve the recommendation as to the notification of Measles, and decided to refer the whole matter to the District Local Authorities for consideration:—

- (a) Every Sanitary Authority should take steps to have the first case of Measles occurring in every house made notifiable.
- (b) The County Council should in co-operation with the District Sanitary Authorities arrange for the special supervision of cases of these diseases at their homes by specially appointed Health Visitors.
- (c) Education Authorities should arrange for instruction of the older girl scholars in the elementary schools and of all classes in the secondary and technical schools on the dangers of these diseases and the measures to be taken to prevent infection and fatal results.
- (d) The County Medical Officer should ask the co-operation of every medical practitioner in the County, including School Medical Staffs, with the Local Authorities in their efforts to reduce the mortality from these diseases.
- (e) A strong representation should be made to the Local Government Board and the Board of Education that in the opinion of this Conference Education Authorities should not be penalised by the exclusion from school on recognised medical authority of individual children on account of infection and that the epidemic grant should be restored.

However, a few days after the holding of the second Conference the Local Government Board issued an order requiring a modified notification of cases of Measles and German Measles, and at the end of the year action was being taken by the County Council, with the object of getting the best results from this compulsory notification.

During 1915 an Act was passed which made the notification of births compulsory throughout England and Wales, and this measure has proved of the greatest value in connection with the development of Maternity and Infant Welfare work, the results of which are each year becoming more evident.

Your obedient Servant,

T. EUSTACE HILL.

AREA.

On 1st April, 1915, the Order constituting Darlington County Borough came into operation and involved a change in the County Area, as not only did the area of the Borough become detached from that of the Administrative County, but in addition 1,004 acres of land in the Darlington Rural District were at the same time transferred to the County Borough, while 346 acres in the County Borough were transferred to the Rural District and the Administrative County. As the result of the formation of the Darlington County Borough and the extension of its boundaries the area of the Administrative County is reduced from 637,672 to 637,014 acres.

POPULATION.

But for the constitution of the Darlington County Borough the population of the Administrative County at mid-year 1915 would have exceeded a million, the estimated figure being 1,002,923. Excluding the County Borough of Darlington and also a population of 1,697 formerly in the Darlington Rural District and now included in the Borough, the estimated population of the Administrative County in mid-year 1915 was 940,190.

During 1915 the Local Government Board confirmed an Order made by the Durham County Council transferring a portion of the Parish of Easington to the Parish of Shotton, both parishes being situated in the Easington Rural District.

VITAL STATISTICS.

In the following table the chief vital statistics of the Administrative County during 1915, and of its Urban and Rural Districts are compared with those of England and Wales:—

Rate per 1000 Population.	Total Urban Districts.	Rural Districts.	Administrative County.	England and Wales.
Birth-rate	27.8	27.5	27.7	21.8
Death-rate ('Standardized')	17.1	14.9	16.1	14.8
Infant Mortality Rate per				
1000 births	131	133	132	110
Zymotic Death-rate	2.38	2.38	2.38	1.29
Smallpox	nil.	nil.	nil.	0.00
Scarlet Fever	0.09	0.12	0.10	0.06
Diphtheria	0.26	0.31	0.28	0.15
"Fever" (Enteric & Continued)	0.04	0.06	0.05	0.03
Measles	1.08	1.06	1.08	0.43
Whooping Cough	0.22	0.22	0.23	0.21
Diarrhea and Enteritis (under 2 years)	0.66	0.59	0.63	0.39
Diarrhœa and Enteritis (under 2 years) per 1000 births	23.8	21.6	22.8	18.1

Compared with 1914 there was a fall in the birth-rate of 3.3 per 1,000; an increase in the total death-rate of 0.5 per 1,000, an increase in the zymotic death-rate of 0.17, and a fall in the infant mortality rate of 3 per 1,000 births. But for an exceptionally high mortality from Measles the zymotic death-rate would have compared very favourably with that of previous years.

INFECTIOUS DISEASES.

The mortality from all the principal infective diseases showed a considerable decline except in the case of Measles and Diphtheria.

For the third year in succession not a single case of Smallpox was notified from the Administrative County.

The following tables give details of the prevalence of notifiable infectious diseases and the mortality from the principal infective diseases.

5

TABLE SHOWING THE NUMBER OF CASES OF INFECTIOUS DISEASES NOTIFIED IN THE ADMINISTRATIVE COUNTY, 1905-1914 and in 1915.

,	. 0		
1915.	 4,291 1,698 267 267 1 36 603	6,902	7.4
Total of 10 years, 1905-14.	176 40,181 13,130 6,967 319 1 351 7,046	68,175	7.5
1914.	7,797 1,653 584 9 	10,855	11.0
1913.	5,447 1,406 350 6 	7,944	8.5
1912.	5,658 1,252 1,252 357 357 596	7,903	.∞
1911.	19 3,253 1,310 917 33 	6,191	9.9
1910.	3,419 1,258 490 19 	5,879	6.9
1909.	3,737 1,152 1,152 668 24 	6,336	2.2
1908.	2,567 1,146 1,048 1,048 1,048 29 624	5,456	6.4
1906. 1907.	2,234 1,108 4449 19 	4,548	5.4
	2,621 1,298 1,090 1,090 	5,869	6.9
1905.	3,448 3,448 1,547 1,014 93 64 889	7,194	8.5
	Small-pox Scarlet Fever Diphtheria Enteric Fever Continued Fever Relapsing Fever Typhus Fever Puerperal Fever Erysipelas	Total	Attack Rate per 1,000 Living

INFECTIOUS DISEASE (NOTIFICATION) ACT

Weekly Statement of notifiable diseases reported during 1915.

		-					Feve	r			1.		1
Week en	ded	Small-Pox	Scarlet Fever	Diphtheria	Enteric or Typhoid	Typhus	Relapsing	Continued	Pnorperal	Ophthalmia Neonatorum	Erysipelas	Pulmonary Tuberculosis	Non-Pulmonary Tuberculosis
January ,, ,, ,, February ,, ,, March ,, ,, April ,, ,,	2 9 16 23 30 6 13 20 27 6 13 20 27 3 10 17		115 116 94 92 131 101 86 94 99 93 99 76 82 77 91 80	39 31 43 56 41 44 66 55 47 35 29 34 30 26 17 21	8 9 9 10 7 8 7 6 6 5 5 3 2 3 3 2			1	1 3 2 1 2 2	2 1 3 1 1 5 4 2 3 4 2 1 3	18 12 14 10 14 21 11 13 15 8 17 9 9 11 11	24 34 25 20 38 35 28 40 52 44 45 36 40 30 41 42	13 13 22 16 15 24 26 30 22 38 39 29 37 34 29 + 22
May ,, June ,, July ,, August ,, Septembe	24 1 8 15 22 29 5 12 19 26 3 10 17 24 31 7 14 21 28 r 4		72 71 84 59 50 51 68 65 59 60 61 67 74 64 53 69 44 69 55	31 23 39 30 26 17 25 20 24 20 24 30 30 25 13 19 27 31 38	232732263525647585447				1 1 1 2 1 2 1 1 1 1 1	2 4 1 4 1 1 3 1 5 1 3 1 	15 14 17 9 9 13 12 15 7 6 8 9 6 10 12 8 11	36 47 46 38 33 26 36 44 40 36 50 28 32 32 32 32 33 36 36 36 34	18 21 29 32 31 24 33 24 22 21 22 18 21 30 20 12 15 21
October November	11 18 25 2 9 16 23 30		76 102 103 78 82 79 102 89 101 101	32 52 36 27 33 39 26 24 26 35 38	5 11 4 6 7 6 8 7 5 3 2			 1 2	 3 1 	2 1 2 3 1 1 1 3	11 9 11 8 4 15 14 10 8 11 17	26 28 30 41 19 21 36 20 31 26 24 36	17 25 23 21 15 21 20 35 19 10 15
 December .;; January otal for the	27 4 11 18 25 1	•••	92 83 92 96 69 64 4291	31 26 30 38 29 40	$ \begin{array}{c} $	1		6	36	1 1 3 4 1	11 12 14 11 15 8 12 603 1	35 21 20 17 24 41	18 30 18 13 15 16 12 184

TABLE GIVING FOR EACH YEAR THE NUMBER OF DEATHS AND THE DEATH-RATE FROM THE SEVEN PRINCIPAL ZYMOTIC DISEASES DURING THE TEN YEARS,

15.
9
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N
AND
4
16
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TO
10
905
0

1915	940,190	•	102	270	51	1009	216	596	2244	2.38
Mean of 10 years.	908,467	•	16	172	118	332	291	856	1866	2.06
1914	985,292	•	214	228	110	164	359	1110	2185	2.21
1913	970,070	•	148	184	29	398	177	834	1808	1.86
1912	951,750		66	157	63	496	259	257	1332	1.39
11611	933,780	•	74	155	159	417	365	1547	2717	2.90
1910	916,150	:	70	150	85	176	224	705	1407	1.53
1909	898,840	:	80	149	107	324	217	506	1383	1.53
1908	881,870	:	65	152	159	236	452	1217	2278	2.58
1907	865,210	•	55	169	87	581	268	497	1657	1.91
1906	848,870	:	89	168	188	138	248	1164	1974	2.32
1905	832,840	2	11	210	164	393	345	734	1925	2:31
	Estimated Population	Small-pox	Scarlet Fever	Diphtheria	Enteric and Continued Fever	Measles	Whooping Cough	Diarrhœa	TOTAL	Rate per 1,000 Living

TABLE SHEWING, FOR EACH MONTH, THE NUMBER OF BIRTHS, THE NUMBER OF DEATHS FROM ALL CAUSES, AND THE NUMBER OF DEATHS FROM THE CHIEF ZYMOTIC DISEASES IN THE ADMINISTRATIVE COUNTY OF DURHAM, DURING 1915.

Whooping and Enter- Cough. itis (under 2 years.)	25	23	18	12	21	17	28	64	171	133	54	33	596
Whooping Cough.	18	24	23	33	14	17	п	15	12	19	13	17	216
Measles.	72	117	617	194	160	149	56	54	1	ಣ	7	7	1009
Fevers (Enteric and Con- tinued).	8	4	_	4	:	ŭ	9	9	10.	2	ŭ	61	51
Diph- theria and Croup.	38	34	28	14	19	18	19	18	21	17	18	526	270
Scarlet Fever.	21.	13	G:	6	10	1	6	9	က	10	7	<u> </u>	102
Small-	:		•	ø 6	:	•	•	•	•	•	•	•	
Total Zymotic Deaths.	170	215	867	266	225	213	129	135	612	187	104	98	2244
Deaths under 1 year.	360	336	404	339	286	232	224	214	303	280	237	238	3453
Deaths.	1417	1427	1660	1521	1282	1198	9001	975	1017	1083	1101	1186	14873
Births.	2487	2535	2592	2535	2337	2314	2130	2039	1905	1881	1957	1790	26076
Marie Commission of September 1995 and the Se	•		•	*	4 9 9	•	•	*		:	*	•	
	JANUARY	FEBRUARY	MARCH	APRIL	MAŸ	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	Totals

TABULATED STATEMENT OF THE CHIEF VITAL STATISHICS OF THE ADMINISTRATIVE COUNTY OF DURHAM, COMPILED FROM THE MONTHLY RETURNS SUPPLIED TO THE COUNTY MEDICAL

OFFICER BY THE REGISTRARS.

1915.

			Deaths	Deaths		Rate p	Rate per 1,000 of the Population.	the Pop	ulation.		Deaths	Percentage of Un-
	Estimated Population.	Sirths Nett.	All Causes Nett.	trom Zymotic Diseases.	Births and nett rate,	Deaths all causes standard-nett rate, ized rate.	,	Zymotic Disease,	Pulmon- ary Tuber- culosis.	Bronchitis, Pneumonia, and Pleurisy.	1 year per 1000 Births.	cerunea Deaths to Total Deaths.
Boroughs	130,866	3,623	2,559	342	27.68	19.55	112.11	19.7	1.45	4.07	133	<u>မာ</u> က်
Other Urban Districts	378,445	10,565	5,956	873	27.91	15.73	4	2.30	0.92	2.96	130	8. S.
Rural Districts	430,877	11,888	6,358	1,029	27.59	14.75	14.99	2.38	0.81	2.70	133	7.7
Administrative County	940,190	26,076	14,873	2,244	27.73	15.81	16.14	2.38	0.94	2.99	132	3.0
England and Wales	37,302,983	814,527	562,326 48,406	48,406	21.8	15.1	14.8	1.29	:	:	110	1.4

BACTERIOLOGICAL EXAMINATIONS.

The following table gives for each year the number of specimens examined from 1912 to 1915, and it will be noted that there was a considerable increase during the last-named year in respect of all the diseases dealt with:—

	Nui		Specin	nens	Re	sults in	1915,
	1912	1913	1914	1915	Posi- tive.	Nega- tive.	Incon- clusive.
Diphtheria	1046 222 977	876 236 1062	*1089 369 1255	802 209 1163	327 82 310	435 127 853	31
Totals	2245	2174	2713	2174	719	1415	31
Positive Cases (proportion per cent.)		31.4	32.6	33.1	• • •	• • •	.

*7 Specimens were contaminated.

ISOLATION HOSPITALS.

The provision for institutional treatment of Smallpox and the ordinary infectious diseases is generally satisfactory throughout the Administrative County, except as regards Stanhope Urban and Weardale Rural Districts and the Seaham Harbour Urban District as regards Smallpox.

The new Isolation Hospital for the Easington Rural District at Thorpe was completed, as were also extensions to the hospitals of the Auckland, Shildon, and Willington Joint Hospital Board at Tindale Crescent and Helmington Row.

In July, 1915, an Agreement which had received the approval of the Local Government Board was completed, by which the Smallpox Hospital of the Durham and Brandon Joint Hospital Committee at Shincliffe became available for the treatment of smallpox patients from the districts of the Chester-le-Street Joint Hospital Board and the Blaydon, Ryton, and Whickham Joint Hospital Committee. By this arrangement the smallpox hospitals in the two last named areas are now available for the treatment of cases of tuberculosis.

The tabulated statement on page 36 of my Annual Report for 1913 otherwise accurately represents the isolation hospital accommodation at present provided in the Administrative County.

PREVENTION OF TUBERCULOSIS.

The notified cases of Pulmonary Tuberculosis numbered 1,765 and of other forms of Tuberculosis 1,184. The registered deaths numbered respectively 891 and 430.

It will be seen from the following table that there was again a slight increase in the death-rate from Pulmonary Tuberculosis in the Administrative County, and that, as in previous years, the death-rate in the Boroughs very considerably exceeded that recorded in the other parts of the County.

The death-rate from non-pulmonary tuberculosis was 0.45 per 1,000 population, as compared with 0.43 in 1914.

The following table gives the death-rate from phthisis in the Boroughs and in the Urban and Rural Districts in the County, and it will be noted that the rates in the Boroughs again considerably exceed those for the rest of the County:—

Rate per 1,000 Living.	1912.	1913.	1914.	1915.
Boroughs	1·22 0·95 0·74 0·91	1·28 0·89 0·73 0·89	1·36 0·98 0·69 0·93	1·45 0·92 0·81 0·94
England and Wales	1.04	1.00	1.04	1.16

As regards the County Scheme for the Treatment and Prevention of Tuberculosis there was a considerable development during 1915, and there was a very large increase in the number of patients

treated both at the County Dispensaries and in residential institutions. Particulars as to the County Dispensaries and residential institutions available for the treatment of County patients, together with particulars as to the patients treated are given in the following brief report of Dr. A. G. R. Cameron, the County Tuberculosis Medical Officer.

COUNTY TUBERCULOSIS SCHEME.

The number of patients admitted to Residential Institutions for the treatment of Tuberculosis was 987. Of these 929 were admitted to Sanatoria and 58 to General Hospitals for surgical treatment. The number of patients discharged was 934, and the number remaining under treatment at the end of 1915 was 243. The daily average number of patients under treatment in Institutions during the year was 233, and the average period of detention was 846 days.

The statement which follows gives separately, particulars relating to the treatment of Pulmonary and Non-Pulmonary cases. There it will be seen that 891 cases of Pulmonary Tuberculosis were admitted to Institutions, as against 659 in 1914, and the number of Non-Pulmonary cases admitted was 96 as against 19 in 1914.

Particulars relating to the work of the Dispensaries are also shown. The number of patients examined for the first time was 2,886 as against 1,450 in 1914, the number treated at the Dispensaries was 3,321 as against 1,182 in 1914, and the number remaining under treatment on the 31st December, 1915, was 1,878, the corresponding figure for 1914 being 409.

SANATORIA AND HOSPITALS.

PULMONARY CASES.

	Insured.	Not Insured.	Total.
Admissions	447	. 114	891
Discharges	439	. 408	847
No. of days treatment	35,802	. 36,737	72,539
No. remaining under treatment			
at the end of the year	101	. 121	222

Non-Pulmonary Cases.

	Insured.	Not Insur	ed.	Total.
Admissions	30	 66		96
Discharges	27	 60		87
No of days treatment	2,206	 4,308	• • •	6,514
No. remaining under treatment				
at the end of the year	6	 15		21

DISPENSABIES.

	Insured		Not Insured.		Total.	
No. of patients examined	805		2,081		2	886
Result of examination:—Found	to be					
Tuberculous, 2,216; Non-Tubercu	ilous, 2	92;	Under O	bserva	ition,	378.

	Insured.	Not Insured.	Total.
No. of patients treated at the			
Dispensaries	1,027	2,294	3,321
Remaining under treatment at			
the end of the year	438	1,440	1,878

RESULTS OF INSTITUTIONAL TREATMENT. Of the 934 cases discharged from Sanatoria and Hospitals during the year, 370 were classified as "Fit for Work" or "Fit to attend School," 332 as "Improved," 119 as "Stationary," 46 as "Worse," and 39 left before their treatment was completed. In addition, the deaths of 29 patients in Sanatoria have to be recorded.

RESIDENTIAL INSTITUTIONS. The accommodation for patients suffering from Tuberculosis is given hereunder:—

In June, 1915, an additional pavilion was erected at Hebburn Sanatorium, and the accommodation for Tuberculous patients increased from 16 to 24. Pavilions containing twelve beds each were also erected during the year and opened in May, 1915, at Helmington Row and Tindale Crescent Hospitals, which are two institutions belonging to the Auckland, etc., Joint Hospital Board. The contemplated extension at the Sunderland Rural District Hospital has not been carried through. The Pavilion to contain 40 beds at the County Sanatorium, Wolsingham, was not quite

completed at the end of the year, but is now occupied. In addition to the accommodation given below, 42 male patients were sent to Stanhope Sanatorium, 19 female patients to Leazes House, Wolsingham, and two to Blencathra Sanatorium, near Keswick.

Arrangements have also been made with the following General Hospitals for patients requiring surgical treatment, viz., Darlington Hospital, Durham County Hospital, Gateshead Hospital for Children, The Hartlepools' Hospital, Ingham Infirmary, South Shields, Lady Eden Hospital, Bishop Auckland, Monkwearmouth and Southwick Hospital, The Royal Infirmary, Sunderland, and the Stockton and Thornaby Hospital. To these hospitals 58 cases were admitted during the year for surgical treatment, and the number has since considerably increased.

As regards residential accommodation for phthisical patients the following beds were available at the end of 1915:—

County Sanatorium, Wolsingham	28
Chester-le-Street (Blackfell Tuberculosis Hospital)	25
Sunderland (Tuberculosis Hospital)	12
Hebburn (Tuberculosis Hospital)	24
Ryton (Sealburn Tuberculosis Hospital)	16
Lanchester (Maiden Law Tuberculosis Hospital)	42
Felix House, Dinsdale (Daily Average Number)	25
Children's Sanatorium, Stannington do	40
Tindale Crescent, Bishop Auckland	12
Helmington Row, Crook	12
_	
Total	236

DISPENSARIES. The Tuberculosis Dispensaries at which patients are treated under the County Tuberculosis Scheme are situated at the following places in the County:—Bishop Auckland, Consett, Darlington, Durham (Sherburn House), Hartlepool, Horden, Jarrow, Sunderland, Stockton and Stanley. A new Dispensary has been erected at Chester-le-street, and arrangements have been made for opening it during the first week of January, 1916.

Owing to the difficulties of finding suitable premises it has not been possible to open Dispensaries at Blaydon and Felling. In both these places, but more particulary in the Blaydon area, Dispensaries are greatly needed.

Supervision of Tuberculosis Patients. The number of visits paid by our Health Visitors to the homes of Tuberculosis patients was 20,354 as against 16,562 in 1914. Our Health Visitors also attended the Dispensaries whenever they were open and assisted with the clerical work, the weighing of the patients, and the dressing of the surgical cases etc. Their total number of attendances at the Dispensaries was 576.

OPEN AIR SHELTERS. These are provided for tuberculous patients and there are now over 40 in use. The majority of these are lent to patients to enable them to carry out the "Open-air Treatment" at their homes. More shelters are being ordered to meet the increased demand.

STAFF. The Chief Tuberculosis Officer and four Assistant Tuberculosis Medical Officers are on Military Service. The Deputy and Assistant County Medical Officer is carrying out the duties of Chief Tuberculosis Medical Officer with the Assistance of two whole time and two part time Tuberculosis Medical Officers. The acting Medical Superintendent at the County Sanitorium, also gives his services at one of the Dispensaries. By this means it has been possible to carry on the work of the County Tuberculosis Scheme, but the work of the Tuberculosis Department is steadily increasing and becoming more difficult to administer under the present arrangements.

The County Council continue to provide treatment for tuberculous patients resident in the County Borough of Darlington. Every additional year's experience emphasises the fact that the prevention of tuberculosis is impossible so long as the unsatisfactory housing conditions which prevail in so many parts of the County are allowed to continue. Moreover, except for a short prolongation of the life of the patient the institutional treatment provided is of little permanent value in many cases, as even where the disease has been arrested in conquence of the treatment of the patient in a sanatorium, a permant improvement is not possible when the patient, as is so frequently the case, has on leaving the sanatorium to return to an insanitary, illventilated, overcrowded dwelling. Under such circumstances the patient loses his resisting power, becomes re-infected and falls a victim to the disease at an early date, so that the large sums of money expended on him out of public funds are for the most part wasted. There is no doubt whatever that the key of the tuberculosis prevention problem is better housing. If a population is properly housed, then a well organised scheme for the prevention and treatment of the diseases will undoubtly be effected.

Another circumstance militating against success in the treatment of Tuberculosis cases is that many medical practitioners do not notify cases until the disease has made such progress as to seriously jeopardize the chances of arresting the disease, whatever treatment is adopted. No doubt many patients do not consult a medical man until the progress of the disease has so undermined their constitution as to interfere with their working capacity, and to overcome this difficulty I can suggest nothing better than a systematic educational campaign throughout the County as soon as conditions are more normal. At the present time, with our limited staff, this is impossible. On the other hand I have no doubt that many medical practitioners unnecessarily postpone the notification of cases of Tuberculosis in their practice, and unfortunately some of them rely more on the result of a bacteriological examination of the sputum than on physical signs, apparently not realizing that the disease may be definitely established without any evidence of tubercle bacilli in the sputum. As a matter of fact the presence of such bacilli in the sputum indicates that there had already been some breaking down of lung tissue, and that the disease has already advanced beyond the stage when treatment in a Sanatorium is likely to be most effective. These facts have recently been brought to the notice of medical practitioners in the County, and they have been especially urged to promptly notify all cases of Tuberculosis at the earliest possible moment.

THE NOTIFICATION OF BIRTHS.

The notifications received were equal to 89 % of the total number of births registered during the year, the percentage for the previous year having been 86.2. In my last report I dealt with

the reasons for non-notification, namely, neglect by certain medical practitioners, and the practice of midwifery by uncertified midwives. The number of whole-time Health Visitors on the County staff at the end of 1915 was 25. The following table gives particulars of the work accomplished by them during the year:—

COUNTY HEALTH VISITORS.

Statement of Work accomplished during the year ended 31st December, 1915.

Births:—		
1st Visits	20,751	
Re-Visits	29,437	
		50,188
School Children	13,083	
Schools	1,932	
		15,015
Tuberculosis:—		
1st Visits	2,728	
Re-Visits	17,626	
		20,354
ATTENDANCES AT DISPENSARIES		576
,, CHILD WELFARE CENTRES		150
Summary—		
Total number of visits (not including		
attendance at Dispensary or Child		
Welfare Centre or Ineffective Visits)		86,804
Average daily number of visits per II.V.		18.4
Ineffective visits		5,875
REPORTS TO DISTRICT M.O.H. OR SANITARY INSPECTOR		
Overcrowding	278	
Other Sanitary Defects	801	
		1,079
WHICKHAM DISTRICT NURSES:—		_,
Total number of visits	991	
Attendances at Dispensary	3	

STOCKTON HEALTH VISITOR:—	
Total number of visits	2,418
Attendances at Dispensary	46
HARTLEPOOL HEALTH VISITOR:—	
Total number of visits	415
Attendances at Dispensary	44
Grand Total of all Visits (not including	
Ineffective Visits)	90,735

Voluntary Maternity and Child Welfare Centres were established during the year at Haverton Hill, Durham, and Shotley Bridge, and received the assistance of our local Health Visitors, and literature was also provided from the County Health Department.

WATER SUPPLY.

The greater part of the County is supplied from public undertakings, and the principal of these are: The Weardale and Consett Water Coy., The Sunderland and South Shields Water Coy., and the Newcastle and Gateshead Water Coy.

The Urban Districts of the County are supplied as follows:— By the Weardale and Consett Water Coy.:—

Durham, Annfield Plain, Benfieldside, Brandon and Byshottles, Chester-le-Street, Consett, Crook, Leadgate, Shildon, Spennymoor, Stanley, Tanfield, Tow Law, Willington, Part of the Blaydon U.D. and the Marley Hill district of Whickham.

By The Sunderland and South Shields Water Coy.:-

Jarrow, Hebburn, Southwick, Seaham Harbour, and part of Houghton-le-Spring U.D.

By the Newcastle and Gateshead Water Coy.:— Ryton, Felling, and part of Blaydon. The Tees Valley Water Board supply the Borough of Stockton; the Hartlepool Gas and Water Coy., the Borough of Hartlepool. The Lambton and Hetton Coal Coy. supply Hetton-le-Hole and part of the Hetton Urban District, and the following urban districts have their own supply:—Darlington, Bishop Auckland, Stanhope, and Barnard Castle.

Of the Rural Districts the Weardale and Consett Water Coy. supply about 50 % of the houses in Chester-le-Street, also the Auckland Rural District, the Durham Rural District, Lanchester Rural District, and part of the Sedgefield and Weardale Rural Districts.

The Sunderland and South Shields Water Coy. supply part of Chester-le-Street Rural District, Easington and Houghton-le-Spring, also South Shields and most of the Sunderland Rural District. About 29 % of the houses in Chester-le-Street are also supplied by the Newcastle and Gateshead Water Coy.

The Tees Valley Water Board supply a part of the Stockton Rural District, Barnard Castle and Darlington Rural Districts.

A part of the Chester-le-Street Rural District is supplied by the Lambton and Hetton Coal Coy., and part of the Hartlepool Rural District by the Hartlepool Gas and Water Coy.

In the more sparsely populated districts the domestic supply is chiefly from springs and shallow wells.

In the north-eastern area of the County the water is derived from deep wells and is very hard, but the other public supplies are mainly upland surface and river water. The upland surface water in some cases has a plumbo-solvent action but is excellent in quality. As stated in my previous reports, however, the river supplies are not satisfactory for, above the several intakes, the rivers are polluted by sewage, and although the water is filtered before distribution, it cannot be regarded as free from danger.

During the year the Weardale and Consett Water Coy. promoted a bill for providing increased water supply for their area by

the construction of a large impounding reservoir at Burnhope, near Wearhead, and the Bill, with certain amendments, has received the assent of Parliament.

At Newbiggin, in the Barnard Castle Rural District, the supply was inadequate during the summer, and at Stanhope, owing to the fact that the reservoir is only sufficient to store one day's supply, the water was cut off during the prolonged drought in the summer at morning and evening as a precautionary measure.

DRAINAGE, SEWERAGE, AND SEWAGE DISPOSAL.

Many schemes of drainage, sewerage and sewage disposal were prepared during the year but, owing to the War conditions, could not be carried out, but it is the intention of the several local sanitary authorities to proceed with the work at the earliest possible moment when a favourable opportunity arises.

The Bishop Auckland Urban District Council were most anxious to proceed with their scheme for the drainage of the south end of the town, and applied to the Local Government Board for sanction to borrow £11,000, the balance of a loan already sanctioned for sewerage works, but were informed that the Board could not see their way to sanction the raising of the amount required at the present time.

A new circular filter has been provided at the Littleburn Sewage Works and is stated to be acting satisfactorily. The filter bed at the West Sleetburn Sewage Works (east side) was completed during the year and is also working satisfactorily. New sewers have been laid at Langley Moor and at Brandon Colliery (1,260 yards).

The Chester-le-Street Urban District Council made application to the Local Government Board for sanction to borrow £8,000 to provide a Sewage Purification Works for Pelton Fell, but owing to the present crisis the scheme is in abeyance.

In the Spennymoor Urban District the scheme for the provision of a new system of sewers and sewage disposal works was carried out during the year.

In the Auckland Rural District the new sewage purification works at Witton Park were completed and plans for the construction of similar works at Toronto and at Sunnybrow were prepared, but the carrying out of the scheme has been left over until the end of the war.

In the Easington Rural District the scheme for carrying a sewer from Haswell to the sea, in connection with the South Hetton, Murton Colliery, etc., sewage scheme, has also been postponed until the end of the War, but during the year new sludge beds were completed at Murton.

At Ludworth, in the Durham Rural District, new sewage purification works consisting of settling tanks, and percolating filters have been provided.

The Stanley Urban District Council have had under consideration the question of the sewage disposal of their district, and have instructed a firm of engineers to report on their present works at Hustle Down, and to advise them as to the best means of dealing with the matter, and the Council are awaiting this report.

Sewage disposal works at Witton Gilbert, in the Chester-le-Street Rural District, were completed during the year, but the treatment of the sewage could not be commenced owing to the subsidences from the colliery workings.

At Urpeth Comery, in the same district, it is proposed to provide new sewage disposal works, and during the year new sewers for this area have been laid.

The attention of the Darlington Town Council has been drawn to the insanitary condition of their sewage disposal works at Stressholmes, which discharges its unpurified effluent into the river Skerne.

The Shildon Sewage Farm has given much trouble during the year, and the County Health Inspector has on several occasions reported on the unsatisfactory way the farm is looked after.

A statutory notice was served on the Chester-le-Street District Council with respect to the Pelton Fell Colliery and Pelton Village Sewage Disposal Works. These works are seriously affected by colliery subsidences.

A statutory notice was also served on the District Council with respect to the pollution of the River Team in connection with the Birtley Sewage Farm. It is the intention of the Council to drain the Birtley sewage into the Gateshead sewers, and they have been negotiating with the Gateshead Corporation, but owing to the request of the Local Government Board to curtail all expenditure except what was absolutely necessary, the Council decided to take no further steps.

The sewage disposal works at Page Bank and at Willington have also been most unsatisfactory, and the attention of the District Council has been drawn to the gross pollution of the river by these works.

RIVERS POLLUTION.

The County Health Committee having from time to time made representations to the Local Government Board relative to the amendment of the law with respect to the pollution of streams, the Board have replied that they have caused such representations to be noted for consideration in the event of further legislation on the subject being proposed.

It is extremely probable that in the near future, after the passing of the present crisis, there will be further legislation in this direction in view of the ninth and final report of the Commission on the purification of sewage and trade wastes which have been issued. Seeing that we have now in operation in this County a large number of bye-product works dealing with the distillation of coal, tar, etc., from which pollutions are frequently taking place with much damage to the streams, it is to be regretted that the Commission's labours have been brought to a close before they had supplied us with information as to how best to treat these and other wastes of an industrial character. We can only hope that at an early date

the simplification of the law dealing with pollutions will be brought about, and that the findings and recommendations of the Commission will also be given effect to in order that where necessary such polluting wastes may be treated on a thoroughly scientific basis with the greatest benefit to all concerned.

Owing to the present crisis and to the Board having refused to sanction the necessary loans, even in cases where loans had already been sanctioned but not taken up, the construction of several works has been postponed. However, at Ludworth Colliery an installation of settling tanks and percolating filters has been provided, whilst at Witton Gilbert there has also been provided an installation of settling tanks and double contact beds. Six statutory notices have been served during the year. One notice was complied with by the construction of settling tanks, etc., and five were not proceeded with owing to the war.

It is to be hoped that the District Councils will, as far as possible, by the preparation of plans, etc., and provisionally securing sites, forward their schemes in readiness for the cessation of hostilities, and thus assist the speedy return home of large numbers of men to civil employment.

It seems to me that it would be in the interest of the community were the Board to invite the early deposition of plans, etc., for their consideration with this end in view.

In the meantime, every effort should be made to keep existing works as efficient as possible.

EXCREMENT REMOVAL AND DISPOSAL.

Repeated reference has been made in these reports to the conservancy system of excrement removal and disposal, and the great danger to health which this system entails. It is therefore encouraging to find that the Medical Officers of Health in this County are unanimous in recommending their respective sanitary authorities to do away with the insanitary ash-closets and ashpit-privies and to provide water-closets in their place.

This work of conversion like other sanitary measures has been difficult to carry out under the present conditions, but in spite of the difficulties a considerable number of conversions have been effected though in some districts the rate of progress has been very slow, and unless the work is undertaken more energetically it will be many years before they are entirely abolished.

No district in which these insanitary closets are in general use can be regarded as satisfactory from a health standpoint, and in this connection I desire to again draw attention to the provisions of Section 39 of the Public Health Acts Amendment Act. 1907, which gives authorities power to carry out the work expeditiously. The additional cost may be considerable but I feel sure that the advantages would be so great that it would be money well spent.

In the Stockton Urban District where the Act referred to is in operation, during the first eight months of the year 862 conversions of ash-closets to water-closets were effected, and many more would have been altered but for War conditions.

In Consett I am pleased to record that 104 covered ashpit-privies were converted into water-closets. In a number of cases the District Council laid the necessary drains free of charge and contributed £1 towards the cost of each conversion. There are now no open ashpit-privies in this district. The Council are also recommending the provision of dustbins in place of ashpits, and in 156 cases ashpits were abolished by the Council and in a number of other cases the owners have, on the recommendation of the Sanitary Inspector, consented to provide these sanitary ashbins, and to discontinue the use of the ashpits.

Referring to the conditions which favour excessive infant mortality, the Local Government Board in a Circular letter to sanitary authorities, dated 25th July, 1913, writes as follows:—"In par-"ticular I am to remind the Council of the danger to health caused "by accumulations of refuse in the neighbourhood of dwellings. "Such accumulations provide breeding grounds for flies, and are "otherwise open to serious objections."

Referring to the methods of disposal of refuse and excrement the Board point out that however carefully closets under the conservancy system are emptied and cleansed, the conditions associated with them in urban districts are generally a menace to public health and especially the health of the children.

In the Consett Urban District the infant fortality during the year was only 118 as against an average of 132 for the whole Administrative County, and I cannot help feeling that the abolition of these insanitary closets and the provision of ashbins have contributed to this satisfactory result, and I hope that other sanitary authorities will follow the example of Stockton and Consett, for there is very much room for improvement.

The following table gives approximately the number of various types of closets in the Administrative County, and the number of conversions effected during 1915:—

•	Total number in District.			Ashpit- convert	Ash- Closets	
District.	Water- Closets.	Ash- Closets.	Ashpit- Privies.	Ash- Closets.	Water- Closets.	converted into Water- Closets.
URBAN.						
* Darlington Borough	8596	6739	680	• • •	203	5
Durham ,,	2683	93	507		16	• • •
†Hartlepool ,,	791	4945		• • •	• • •	***
Jarrow ,, Stockton ,,	6540	678	5543	2	862	
Annfield Plain	633	1034	1266	7]	
Barnard Castle	833	67	66		8	6
Benfieldside	506	493	657	• • • >	46	
Bishop Auckland	2031	753	530	11	26	6
Blaydon	1625	3188	1025		16	13
Brandon & Byshottles.	216	3345	236	2		
Chester-le-Street	1400	1660	21	• • •	25	5
Crook	$\begin{array}{c} 1144 \\ 290 \end{array}$	$\begin{array}{c} 641 \\ 1902 \end{array}$	$\begin{array}{c} 348 \\ 75 \end{array}$	9	129	21 6
Felling	517	4161	27		15	30
Hebburn	283	4073	45			2
Hetton-le-Hole	436	2618	75	45	3	
Houghton-le-Spring	513	1020	436		10	
Leadgate	195	103	390	2	8	
Ryton	724	1378	577	3	17	. 9
Seaham Harbour	1596	94	767			5
Shildon	620	23	68		14	5
Southwick-on-Wear	1248	773	465		47	
Spennymoor	299	2971	477	10	3	
Stanhope	150	186	11			2
Stanley	1005	2828	905		24	57
Tanfield	187	1525	508	5 2	4	
Tow Law	39	433	236	17]	• • •
Whickham	279	2078	1.00	2	1	13
Willington	330	1550	162	54	14	14
RURAL	070	0000	1005			
Auckland	676	9086	1397	41	31	46
Barnard Castle	443 2449	1066 9467	11 6 9 263 3	24	8	
Chester-le-Street	265	363	1430	$\frac{22}{2}$	26 3	9
Darlington				4	- 1/	* * *
Easington	940	9421	2798	142	ii	
Hartlepool	53	357	148	2		* * *
Houghton	160	4286	650	$\overline{56}$	10	
Lanchester	468	355 6	2279	41	4	6
Sedgefield	392	4945	1371	30	16	• • •
South Shields	4059	2764	141	45	12	17
Stockton	367	1929	104			17
Sunderland	965	4125	324	$\frac{2}{10}$	27	0
Weardale	113	106	936	10	2	1

^{*} On the 1st April, 1915, Darlington became a County Borough, but the above figures are for the whole of the year.
† Water-closet town.

HOUSING.

The provision of houses for the Working Classes, the remedying of sanitary defects, and the abatement of overcrowding, which, in the past have formed such a prominent part of the work of the sanitary authorities in this County have to a large extent been in abeyance during the War owing to the shortage of labour, the depletion of the sanitary staff, and the fact that only in very urgent and exceptional cases were the local authorities able to obtain the sanction of the Local Government Board to raise a loan for the carrying out of Housing Schemes. In one or two instances, however, where the work had already been commenced and contracts entered into, sanction was given and building proceeded. The statement which follows, and the table given on page 38 and appendix C. & C1. summarize some of the chief activities in the various districts during the year. In many of the other districts only minor defects and those which were urgently needed were attended to:—

Hartlepool Borough. An Enquiry was held by the Local Government Board on the 3rd March, with reference to the application of the Town Council for a loan, estimated at £15,000, for carrying out an improvement scheme under Part I. of the Housing of the Working Classes Act, 1890, in the Cleveland Street area, and towards the end of the year a formal order was made confirming the improvement scheme. In this area 17 houses were closed after purchase by the Town Council, 10 were closed by the owners and 9 were subsequently demolished.

STOCKTON BOROUGH. In the Borough of Stockton 65 new houses were built by private enterprise. The corresponding figure for 1914 and the three preceding years was 103, 108, 97 and 42.

Annfield Plain Urban District. At Annfield Plain the scheme of the District Council to provide 68 houses under Part III. of the Housing of the Working Classes Act, 1890, was proceeded with, but owing to the difficulty of obtaining labour it progressed slowly, but 30 new houses were added to the district during the year. In this district the Council decided that during the con-

tinuance of the War no work necessitating structural alterations and costly expense that could be avoided was to be recommended by the Health Department.

Benfieldside Urban District. Towards the end of 1914 an inspection of the Bottle Bank area in the Benfieldside Urban District was made, and as the alterations and repairs to the houses which were being carried out appeared to the County Council to be most unsatisfactory, the Local Government Board were asked to arrange for one of their Inspectors to visit Benfieldside. The Board, however, were unable to comply with the County Council's request, as they could not spare one of their Inspectors owing to the shortage of staff.

BISHOP AUCKLAND URBAN DISTRICT. The proposal to sewer the south end of the town at Bishop Auckland is in abeyance, as the Local Government Board could not see their way to sanction a loan for carrying out the work.

BLAYDON URBAN DISTRICT. At Victoria Garesfield, in the Blaydon U.D., owing to the extreme shortage of water, there was great delay in carrying out the conversion of a number of insanitary conveniences in that area.

Brandon Urban District. During the year Esh Winning and Hedley Hill Terrace were inspected and were the subject of a special report by the District Medical Officer of Health and the Sanitary Inspector. The report showed that in this area there was much insanitary property urgently in need of attention, including, in addition to extensive repairs to property, the provision of water-closets in place of insanitary midden-privies, while at Hedley Hill Terrace, which comprises about 70 houses, the sewering and drainage throughout of this terrace is recommended.

As regards the back-to-back houses at Browney Colliery, the District Council have postponed the question of converting them into through houses until a more favourable time.

Chester-Le-Street Urban District. In the Chester-le-Street Urban District the Council's scheme for the erection of 198 houses has been much delayed. At first on account of difficulty of obtain-

ing a loan and later on account of the shortage of labour. Representations were made to the Local Government Board and in this case sanction was given to the District Council to a loan which would enable them to proceed with the erection of 50 houses. The houses were not completed by the end of the year but progress has been made and it is expected that the houses will be ready for occupation by April, 1916. The contract price for these houses is £10,360 plus another £2,200 for sewers and street works.

Hebburn Urban District. In February an Inspector of the Local Government Board visited the Urban District of Hebburn, and subsequently the Board addressed a letter to the District Council in which they stated that they gathered from their Inspector's Report that there is need for the provision of working class dwellings in the district, that there is a considerable number of houses regarded as unfit for human habitation, and that the Council are seriously hampered in dealing with insanitary property and with cases of overcrowding, by reason of shortage of satisfactory housing accommodation. The Board requested the Council to consider the advisability of preparing a scheme for the erection of houses under Part III. of the Housing of the Working Classes Act, 1890. Here I may remark that this difficulty of dealing with cases of overcrowding owing to the shortage of housing accommodation is referred to in many of the reports of the District Medical Officers of Health.

Hetton-le-Hole Urban District. On the 14th of January the Local Government Board addressed a letter to the Hetton-le-Hole District Council, in which they stated that the Board gathered that the provision of houses was urgently needed to enable the Council to deal with the very unsatisfactory housing conditions in the district, and urged them to prepare a scheme. Draft plans of different types of houses have, I understand, been prepared, and a site chosen, but owing to the impossibility of obtaining sanction to a loan the scheme has not been proceeded with. The Council, in the meantime, would be well advised to work out the preliminaries of a scheme for the re-construction of the John Street area.

RYTON URBAN DISTRICT. In the Ryton Urban District, owing to the absence of the Surveyor, who is also Clerk to the District Council, and the fact that the Sanitary Inspector had to undertake

his duties, it was not found possible to carry out the usual systematic inspection of the district, but a number of structural and other defects were attended to. The District Medical Officer of Health draws attention to the gratifying fact that of the 57 new houses built and occupied during the year 50 have been provided with water-closets, and further states that unless otherwise impracticable, no plan for the erection of new houses should be passed which does not provide for water-closets. With this I entirely concur, for there is not the least doubt that much of the sickness, chronic ill-health and loss of life are due to insanitary midden-privies and ash-closets which obtain in this County.

SHILDON URBAN DISTRICT. In June, 1914, the Deputy and Assistant County Medical Officer made a report on the sanitary circumstances of the Shildon Urban District, a copy of which was forwarded to the District Council for their consideration and observations. In Dean Street the owner has promised to make improvements; at Pit Row the owner has submitted a scheme for the remodelling of the houses, and in the case of 8 houses in Hardy Row and one in Back Queen Street closing orders were made. the case of the houses in Hardy Street the owner appealed against the order, but after an Enquiry which was held by the Local Government Board the closing order was confirmed. I regret, however, to state that with respect to these 9 houses the orders have not yet been carried out. There is much old and insanitary property in this district, much of which has been allowed to get into a very bad state of repair so that much will be required to be done to make them reasonably habitable. There is also much overcrowding, and many of the back streets are unmade. It is to be hoped that when the present conditions become more settled the Council will deal seriously with the various improvements recommended in the report.

Spennymoor Urban District. A communication from the Local Government Board was addressed to the Spennymoor Urban District Council concerning the overcrowding in the district. The Medical Officer of Health and the Sanitary Inspector, acting on the instructions of the Council, made a special enquiry in the matter and in his report states that only a few cases of overcrowding were found.

and all of these have been dealt with. It is difficult to understand how the Medical Officer of Health arrives at this conclusion for at the Census of 1911 the number of overcrowded tenements or separate occupations was 482 and no less than 22'1 % of the population were living under overcrowded conditions, viz., more than two persons per room. A number of men have since joined the Colours, but any scheme for the provision of houses would naturally provide for their return. Moreover, since 1911, the excess of births over deaths amounts to 1,582, and this "natural increase" in the population will continue.

STANLEY URBAN DISTRICT. In the Stanley Urban District 104 houses were built during the year as against 61 in the previous year, and all were erected by private enterprise. It is interesting to record that of these 33 were 3-roomed houses, 60 4-roomed houses, 55-roomed houses, 66-roomed houses and that 52 were fitted with baths in the scullery, and 8 with bathrooms; 13 houses were built without a scullery.

Tanffeld Urban District 27 houses were erected and of these 24 were provided with ash-closets owing, it is stated, to the levels and gradients not being suitable for water-closets. This is much to be regretted, and it is to be hoped that in the future in every Housing and Town Planning scheme the sites will be so chosen that it will be possible to provide every house with a water-carriage system.

Tow Law Urban District. In the Tow Law Urban District the Medical Officer of Health again draws attention to the unmade back strets in his district, which in wet weather are in a deplorable condition, and I might add that in dry weather the dust from such roads and the distribution of the dust associated with the emptying of the insanitary ash-closets are responsible for much illness and more particularly in the case of young children who use the roads as their playground.

WHICKHAM URBAN DISTRICT. The Medical Officer of Health of the Whickham Urban District expresses regret that chiefly owing to the shortage of labour many reforms that were under way have been held in abeyance, and more especially with respect to the small number of conversions from earth and ash-closets to water-closets. At Swalwell little has been effected, and at Marley Hill, owing to the shortage of labour but little progress has been made with the great improvements arranged for. The Whickham Urban District is the centre of one of the larget munition areas in the country, and into this district have flocked a great number of munition workers, with the result that in some parts and more especially at Dunston-on-Tyne there is great overcrowding. This large ward, writes the Medical Officer of Health, has again absorbed most attention.

Willington Urban District. The sanitary circumstances of this district have been the subject of reports from time to time and, at the request of the District Council, the County Medical Officer attended a joint meeting of the District Council and the owners of the back-to-back houses at Willington. The District Council has since passed a resolution in which they give the County Council an assurance that the whole of the back-to-back houses within their district would be converted into through houses or otherwise so altered and improved that through ventilation is provided and that this work would be carried out within 5 years of the termination of the War. The question of providing houses under Part III. of the Housing of the Working Classes Act, 1890, will also be considered at the same time.

Auckland Rural District. The Inspector of the Local Government Board visited this district and enquired into the housing conditions and, in a letter to the District Council, the Board pointed out that in some parts of the district the housing conditions were very unsatisfactory, and that there were a large number that could not be regarded as reasonably fit for human habitation and, further, that there was a deplorable amount of overcrowding. As a result of this report a Committee of the Rural District Council was appointed to consider the matter and to formulate a scheme in accordance with the recommendations of the Board. The Health Officers of the District Council also reported on the sanitary condition of Helmington Row and portions of the township of Evenwood, Coundon and Byers Green. The report supports the opinion expressed by the Inspector of the Board that many of the houses

are in an insanitary condition, but it was not found practicable to proceed with a housing scheme, and under the existing conditions it was not possible to make any rapid progress in remedying the sanitary defects.

I have also to record that at High Row a serious outbreak of enteric fever occurred during the summer of 1914 and that in previous years this disease has been prevalent in the same row.

The County Medical Officer investigated the outbreak and recommended the abolition of the foul midden-privies which apparently have become impregnated with the germs of the disease, and also recommended the provision of water-closets. A conference with the representatives of the owners of that property was subsequently held and as a result they agreed to provide water-closets to the houses and to carry out other improvements as soon as circumstances permitted.

Chester-Le-Street Rural District. The Housing Scheme under Part III. of the Housing of the Working Classes Act, 1907, at Pelton is progressing and up to the end of the year 92 out of the 113 houses which are to be provided were occupied. Other houses built and occupied during the year are as follows:—Urpeth 37, Harraton 28, Lamesley 16, Birtley 15, Burnmoor 10, Washington 10, Witton Gilbert 9, and in other parts of the district 9.

At the latter end of last year attention was drawn to the insanitary condition of Perkinsville, in the Pelton District, where there are 136 two-roomed back-to-back houses. Representations were made to the owners, who were requested to convert these houses into through houses, and as a result the work was in hand at the end of the year. In connection with this property enquiries were made into the infant mortality, and it was found that 52 % of the total deaths from all causes were under one year of age, and no less than 65 % under two years of age, while the corresponding figure for the rest of the County, which has a notoriously high infant mortality, was 28 and 36 % respectively. The number of persons living in these back-to-back houses at the time of the enquiry was 639.

The scheme for the erection of 100 houses at Harraton and 47 at Washington has been held up owing to the loan conditions and the high building prices which obtained at the time, but it is the intention of the Council to proceed with the scheme as soon as conditions are more normal.

During the year steps were taken to close certain insanitary property in the Square, Usworth, and at Middle Row, in the same township. Attention was also drawn to a large number of insanitary property at the Clink, Witton Gilbert, and as a result the owners have given an undertaking to reconstruct and improve these houses after the war, and in the meantime to remedy the defects which are in most need of attention.

DURHAM RURAL DISTRICT. The sanitary condition of Ludworth has been a matter of much concern to both the District and the County Council. In March of this year the County Medical Officer inspected the village with the District Sanitary Inspector, and reported that he found it in a disgracefully insanitary condition, and that practically nothing had been done to improve it during the last six months. The owners, the Weardale Steel, Coal and Coke Coy., Ltd., had given an undertaking to complete the reconstruction of the houses of the village, and to do 20 houses each year, but up to the time of his visit nothing had been done. He also pointed out one row in Edward Street where some improvements had been carried out; these had only been partly completed, though an undertaking was given that the work should be done by the end of With the exception of these houses there is hardly a house belonging to the Coal Company in this area which is reasonably fit for habitation, while most of them are absolutely unfit, and many of them are also seriously overcrowded. Owing to the dearth of dwellings in the district and the fact that many of the male members are on military service the houses would have been promptly closed. It is to be hoped that, as soon as the present conditions become more normal, immediate steps will be taken to remedy the gross sanitary defects which ought never to have been allowed to develop.

During the year the village of East Hetton was the subject of a special report by the District Medical Officer of Health. The report confirms the view which has frequently been expressed by the County Medical Officer as to the necessity for the provision of waterclosets in many of the houses. The Local Government Board have requested the District Council to inform them as to what action they propose to take to secure the provision of satisfactory closet accommodation where necessary in the village.

Easington Rural District. The Council's scheme for the erection of 100 houses at Shotton was not proceeded with on the instructions received from the Local Government Board. The plans, however, were passed for the erection of 355 houses by private enterprise, and during the year 234 were completed and certified for habitation. Of these 128 were colliery houses, 88 private houses, 12 aged miners' homes, and 3 were combined houses and shops.

An important Local Government Board Enquiry was held this year with respect to certain houses in Forster Street, South Hetton. The houses have attic bedrooms—a type of room which is so well known in this County. Amongst other improvements the Council requested the owners to raise the roofs and thus provide better means of lighting and ventilation. In default closing orders were issued and the owners appealed to the Local Government Board against the decision of the District Council. The result of this Enquiry was that the Board upheld the decision of the District Council and requested the appellants to pay the cost of the Enquiry. As there are many such houses in the County the decision is regarded as of the utmost importance for it will no doubt materially assist the local authorities and the County Council in dealing with other houses of a similar type, and thus securing what has long been considered necessary to make these miserable attic rooms reasonably habitable.

In spite of the conditions of the times the report of the Medical Officer of Health of the district shows that many valuable sanitary improvements have been carried out during the year.

HOUGHTON-LE-SPRING RURAL DISTRICT. The sanitary condition of The Raintons, which has been the subject of reports from time to time by the County Health Department, was further enquired

into during the year, but very little appears to have been done to remedy the serious sanitary defects in this area. There have, no doubt, been great difficulties in the way at the present time of getting work carried out, but the defects in most cases are of long standing.

Sedefield Rural District. Amongst other areas in this County in need of urgent attention must be included Trimdon Grange and Trimdon Colliery. These places have been reported on from time to time, and the District Council's attention has been drawn to the insanitary condition of the property and the streets in this area, but for various reasons very little progress has been made. Here, again, the defects are by no means of recent date.

South Shields Rural District. Application was made during the year to the Local Government Board for authority to prepare a Town Planning Scheme for the whole of the Rural District. Similar application was also made to the Board by the adjoining South Shields County Borough. In the latter case the scheme included a part of the County Borough and certain parishes adjoining it, viz., Harton, and parts of the parishes of Whitburn, Boldon, and Boldon Colliery. An Enquiry was subsequently held and it is understood that an agreement has been come to by the respective authorities, but the decision of the Local Government Board is not yet known.

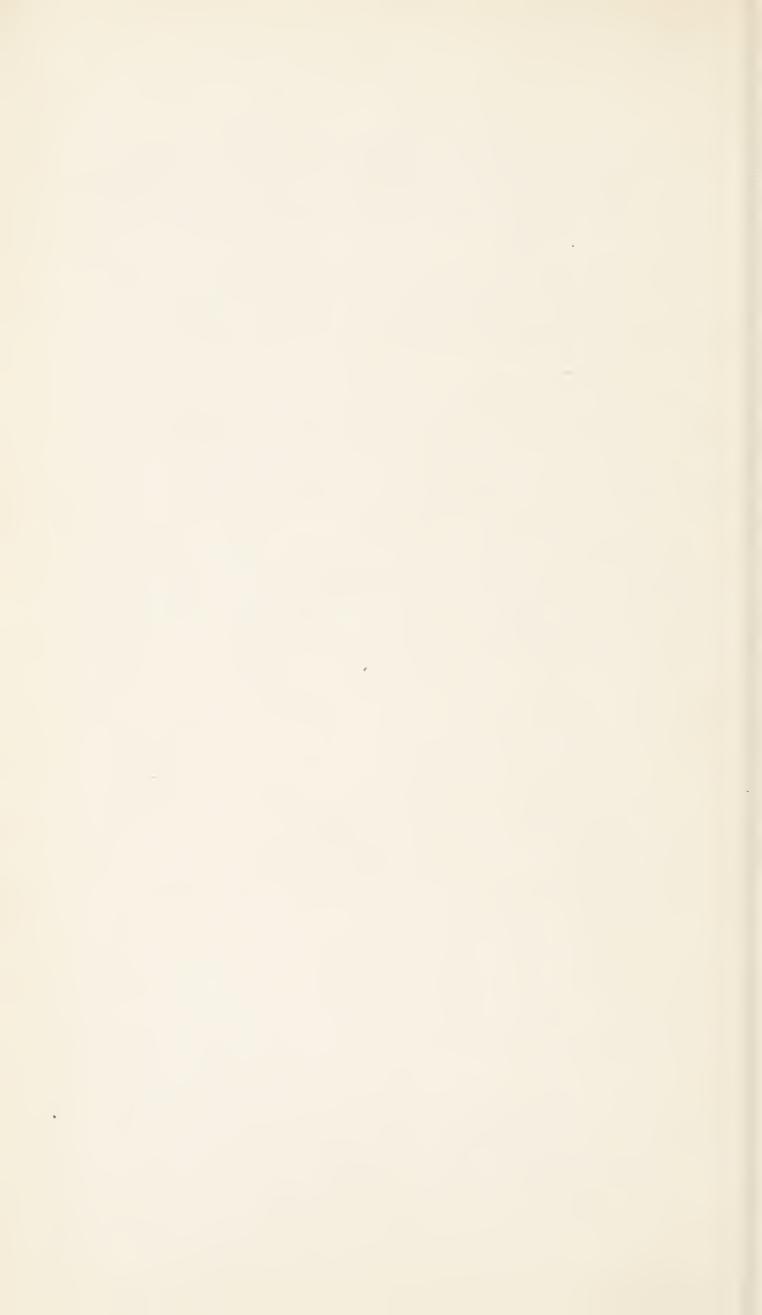
Sunderland Rural District. An Enquiry was held on the 8th of June by one of the Inspectors of the Local Government Board into an application by the Rural District Council for sanction to borrow £22,710 for the erection of houses under Part III of the Housing of the Working Classes Act, 1890. Relating to this scheme it is proposed to obtain authority from the Board to relax the District Council's Byelaws relating to New Streets so as to pemit the substitution of garden suburb roads for 36 feet front and 18 feet back streets, as is required under the existing bye-laws. The Housing Scheme, we have every reason to believe will meet the approval of the Local Government Board but no capital expenditure is likely to be permitted until after the War.

STOCKTON RURAL DISTRICT. The Medical Officer of Health reports that building in this district has been practically at a standstill A few houses have been erected at Haverton Hill to replace those

that are to be condemned at Port Clarence. The Medical Officer of Health also states that the Council have not taken any steps to build houses. This District is one of the least overcrowded districts in the County but the number of overcrowded tenements is above the average for the country as a whole for at the Census of 1911 there were 259 overcrowded tenements containing a population of 2081, which is equivalent to 11.9% of the population for the whole of the Rural District.

Weardale Rural District. Only 4 new houses were built in this District as against 8 in 1913 and 6 in 1914. At the Census of 1911 there were 271 overcrowded tenements containing more than two persons per room, and the proportion per cent of the population living under overcrowded conditions was 19.4.

The following table gives the number and distribution of houses erected and occupied in the Adminstrative County during 1915, together with a statement of work done under the Housing (Inspection of District) Regulations, 1910:—



			Housing (Inspection of District) Regulations, 1910.						
District.	Number of New Houses Erected.	Number of New Houses Occupied.	Number of Dwellings Inspected.	Number of Dwellings unfit for habitation	Number of Representations made.	Number of Closing Orders made.	Number of Dwellings in which the defects were remedied with- out the making of Closing Orders.	Number of Dwellings made habitable after Closing Orders.	
1	2	3	4	5	6	7	8	19	
URBAN. Darlington Borough Durham ,, Hartlepool ,, Jarrow ,, Stockton ,, Annfield Plain Barnard Castle Benfieldside Bishop Auckland Blaydon Brandon and Byshottles Chester-le-Street Consett Crook Felling Hebburn Hetton-le-Hole Houghton-le-Spring Leadgate Ryton Seaham Harbour Shildon Southwick-on-Wear Spennymoor Stanhope Stanley Tanfield Tow Law Whickham Willington RURAL Auckland Barnard Castle Chester-le-Street Darlington Durham Easington Hartlepool Houghton Lanchester	126 8 2 19 65 30 1 3 6 31 18 53 16 25 3 27 22 53 4 57 11 2 1 6 104 27 13 33 33 4 57 11 2 1 6 104 27 27 27 27 27 27 27 27 27 27	126 8 2 19 30 1 3 5 31 17 4 16 25 3 27 22 39 4 34 10 2 1 6 104 13 33 31 16 221 234 4 40 76	292 60 79 106 26 162 284 23 108 60 3 66 115 187 3 657 76 151 246 65 196	4 4 4	6	7 4 2 2 6 36 36 9 19 19	.	16 22 5	
Sedgefield South Shields Stockton Sunderland Weardale	98 116 4	98 35	141 123 172 80 150	12 57 15 4	12 2 13 79	12 6 	55 36 3 1	2	
Administrative County	1536	1340	5318	407	207	` 199	575	78	



STREETS.

Throughout the Country there are, unfortunately, a very large number of unmade-up streets and more particularly in the colliery districts for until comparatively recently it was no uncommon practice to build long rows of houses and to leave the streets in an unfinished state. In the winter months they are almost impassable and in dry weather they are equally objectionable, especially where the conservancy method of excrement disposal is in use. A common practice in these districts is to empty the contents of the closets on to the footpath or on to the roadway, and then to shovel it into an open cart. Thus the soil, in course of time, becomes saturated with organic matter. In wet weather the dirt from the streets is trodden into the houses, and in dry weather the dust, laden with germs of disease, is distributed broadcast. Not infrequently everything in the house is covered with dust including the larder and the food, with the result that Typhoid Fever is endemic in the colliery districts, and in the summer months there is much sickness, and the children, who are most susceptible are carried off in large numbers from epidemic diarrhœa.

I cannot believe that it is due to callousness that the present unsatisfactory condition of the streets is allowed to continue, though the slowness with which improvements are carried out might lead one to believe that rates were of greater consideration than lives, but rather to the failure of those in a position of responsibility to appreciate that it is quite as important from a health standpoint to have sanitary streets as to have an efficient system of drainage. In other words, the objection to unmade-up streets is not merely who use them but because we are convinced that such streets are a constant source of danger to the public health and more particularly when combined, as is usually the case, with the conservancy method of disposal of excreta, inefficient scavenging and unpaved back yards.

DAIRIES, COWSHEDS AND MILKSHOPS.

The paving, drainage, ventilation, lighting and water supply of the dairies and cowsheds in the County are being gradually improved but very much remains to be done, yet very little reference or none whatever is made in the reports of the District Medical Officers of Health to this important question of milk supply.

Radical changes, both in the production and in the method of distribution, are greatly needed and for this purpose more supervision of the dairies and cowsheds than has hitherto been the case will be required. To obtain a wholesome supply of milk it is essential that the cows should be housed in properly constructed, well lighted and ventilated buildings, and that those suffering from Tuberculosis should be eliminated from the herd, and here I would suggest that dairy farmers should be given an opportunity of having their cows tested free of charge.

The regulations which District Councils are empowered to make should prescribe the floor and cubic space for each cow irrespective of whether they are habitually turned out during a portion of each day. There should be an adequate water supply both for drinking and for washing down the cowsheds, and proper washing facilities should be provided for the milkers. Having provided suitable buildings it is of the utmost importance that the dairy farmers should have some knowledge of the hygiene of milk production, and where this is lacking facilities should be given for their instruction so as to prevent the milk from becoming contaminated before it leaves the farm.

At every dairy farm there should be a properly constructed and equipped cleansing room where the churns and milk vessels can be properly washed and stored when not in use and a copper or preferably a steam steriliser and an adequate supply of water should be provided. The milk should be cooled before leaving the farm. This should not be done, as is sometimes the case, in a cowshed, but in a separate room, and if the cooler is placed in the cleansing room the copper and steam steriliser should be fitted up in a convenient position in the yard outside the cleansing room.

The dairy, in connection with a farm or otherwise, should have a constant current of fresh air and should be used for no other purpose. As milk is very liable to become contaminated, a domestic dwelling is not a suitable place from which to retail milk. An outbreak of infectious disease at a dwelling house which is partly used for dairy purposes might seriously affect the carrying on of the business. For the same reason cans, churns and other milk vessels should not be kept in the kitchen or the scullery, and water for cleansing purposes should not be heated in a copper used for boiling soiled linen. In short, the dairy business should be conducted in a place adapted or specially constructed for the purpose, and should be entirely separate from the domestic dwelling. The approach to the dairy or cleansing room should be paved or otherwise made impervious.

To prevent contamination in transit from the farm the churns should be provided with suitable lids, which should be sealed and no mixing of milk should be allowed at railway termini. Railway companies should be required to provide sheds at the stations for churns where they can be kept out of the sun until the arrival of the train, and in the summer months there should be refrigerator vans.

Before leaving the town dairy the milk should be pasteurized and sent out in sealed bottles. The practice of dispensing milk from one can into another in the street should not be allowed.

Taking the degree of contamination as 100 it has been found after exhaustive enquiry that about 40 % of the contamination occurs in the farm and about 20 % during transit on the railway, and about the same proportion at the town dairies and at the consumer's house. Consumers should, therefore, take every precaution to safeguard the milk from contamination after delivery. In the near future it is not improbable that milk will be graded as is done in the United States.

The Milk and Dairies (Consolidation) Act, 1915, contains important provisions with respect to prohibition of the sale of tuberculous milk and gives considerable powers and duties to the County

Medical Officers. It also empowers the Local Government Board to make regulations to include the following purposes:—

- (a) For the registration of persons carrying on the trade of dairyman.
- (b) For the registration of the dairies.
- (c) For the inspection of cattle.
- (d) For the inspection of dairies and persons in or about dairies who have access to the milk churns, etc.
- (e) For prescribing and regulating lighting, ventilation, cleansing, drainage and water supply.
- (f) For securing the cleanliness of milk stores, milkshops, milk vessels.
- (g) For prescribing precautions against infection and contamination.
- (h) For preventing danger to health from the sale of infected, contaminated or dirty milk.
- (i.) For regulating the carting, conveyance and distribution of milk.
- (j) For the labelling, marking and identification, and the sealing of churns for the conveyance of milk.
- (k) For the prohibition of the addition of colouring matter, or manipulating the milk in any way.
- (l) For prescribing the conditions subject to which milk may be sold under the designation "Certified Milk," and prohibiting the sale of milk in respect of which the prescribed conditions are not complied with.
- (m) For authorizing a local authority to make regulations for the purposes aforesaid.

FOOD AND DRUGS.

The administration of the Food and Drugs Act is carried out by the County Council except in the case of the Borough of Hartlepool and the City of Durham. In the non-County Boroughs, namely, Darlington, Stockton and Jarrow, the samples, by arrangement with the County Council, are taken by local officials, while in the remainder of the County they are submitted by the Chief Inspector of Weights and Measures, who reports to the Executive Committee of the County Council.

The number of samples thus submitted to the Public Analyst during the year ended 30th September, 1915, was 1,052, and of these 84 were taken in Darlington, 32 in Stockton and 29 in Jarrow. Of these 125 or 11'9 % were adulterated or below the standard.

The number examined each quarter and the results are here given:—

		Proportion				
	Samp	oles Exami	ned. or be	elow Stan	dard.	per cent.
1st Quarter		293		37		$12^{\circ}62$
2nd Quarter		266		31	• • •	11.65
3rd Quarter		237		26		10.97
4th Quarter	• • • • •	256		31		12.10
				-		
Total		1,052	• • •	125	• • •	11.9

Of the 1,052 articles of food, 318 were samples of milk and the total given below is a result of the analysis as shown, from which it will be seen that out of 319 samples 97 were said to be either adulterated or below standard. In 1914 the percentage below the standard was 40°28, in 1913 22°3, and in 1912 16°4. From these figures it will be concluded that the sophistication of the milk supply of the County is on the increase.

			No	ot Genuin	e	Proportion
	Samp	les Exami	ned. or be	elow Stand	dard.	per cent.
1st Quarter		91		28	• • •	30:7
2nd Quarter		79	• • •	20	• • •	25.3
3rd Quarter		66		21	• • •	33.3
4th Quarter		82	• • •	28		32.7
				-		
Tota	1	318		97	~	30
		-				

MIDWIVES ACT.

The administration of the Midwives Act has been delegated to a Committee of the County Council, and the County Medical Officer is the Executive Officer. An Inspector of Midwives has been appointed to inspect the midwives. She also makes enquiries into all cases where midwives have sent for medical help, cases of deaths occurring in the practice of midwives, cases of Puerperal Fever and cases of Ophthalmia. Much of her time is also taken up in following up cases of uncertified midwifery practice.

The number of certified midwives living in the County on the 31st March, 1916, was 229. Of these 111 have passed the examination of the Central Midwives Board and hold their certificate, but the number who are in practice, including the bona fide midwives who were placed on the register when the Act came into operation, is only 133.

In 1915, 5 cases of Puerperal Fever occurred in the practice of midwives. Immediate enquiries were made in each case and directions given to prevent the recurrence of similar cases. The number of still-births reported was 104, and in 263 cases midwives sent for medical help. The deaths of one mother and 26 infants occurred in their practice. The total number of births in the Administrative County in 1915 was 26,076, and of these 5,167 were notified by midwives.

Three certified midwives were reported to the Central Midwives Board and 3 censured by the Local Supervising Authority. Visits were paid to 86 uncertified women, and where it was proved that they were acting as midwives other than in cases of emergency, they were warned.

There has been a very marked improvement in the cleanliness and efficiency of the midwives since the administration of the Act has been undertaken by the County Council. It is now quite the exception to find a midwife's bag and appliances other than in good order.

The deaths of 3 midwives were reported during the year.

LOCAL GOVERNMENT BOARD ENQUIRIES.

The following Local Government Board Enquiries were held during the year in respect of applications from local authorities in the County relative to public health matters:—

1915.	Applicant.	Amount.	Purpose.	Result.
Mar. 3	Borough of Hartlepool.		Petition under the Housing of the Working Classes Acts, 1890 to 1909, for the issue of an order to confirm an Improvement Scheme made by the said Council under the said Acts and to declare the limits of the area comprised in the Scheme, and to authorise its being carried into execution. The area of the Scheme comprises certain lands in and adjoining Fox Street, Wells Street, Ropery Lane, Johnson Square, Cleveland Street, Chapman Street, Northwell Street, Tweddle Street and Tweddle Court, in the said Borough.	Scheme confirmed subject to certain modifications.
June 8	Sunderland Rural District Council.	£22,260 and £450	Application for sanction to borrow the sum of £22,260 for the purchase of land and the erection of working-class dwellings in the Parish of Ryhope under Part III. of the Housing of the Working Classes Act, 1890, and the sum of £450 for works of sewerage in connection with the scheme.	Withdrawn on the representation of L.G.B. This scheme to be embodied in a larger one at the conclusion of the War.

1915.	Applicant.	Amount.	Purpose.	Result.
June 24	River Tees Port Sanitary Authority.	£2,250	Application for sancton to borrow the sum of £2,250 for the construction of a new foundation for, and the removal thereto of, their Floating Hospital.	Notproceeded with.
July 1	County Borough of West Hartlepool.	•••	Application under Part II. of the Housing, Town Planning, &c., Act, 1909, for authority to prepare a Town Planning Scheme with reference to an area situate partly within the County Borough and partly within the Rural District of Hartlepool.	proved by
Sept. 29	W. R. Walker, Esq., Egglestone, Darlington.		Appeal by the owner of certain dwelling-houses known as Nos. 1, 2, 3, 4, 5, 6, 7 and 8, Hardy's Row, Shildon, against a Closing Order, made by the Urban District Council of Shildon, prohibiting the use of such dwellings for human habitation until in the judgment of the Council the said dwelling-houses are rendered fit for that purpose.	L.G.B. confirmed the Closing Order.

COUNTY COUNCIL ENQUIRIES.

The following Enquiries, bearing on public health administration, were held by the County Council during 1915:—

1915.	Applicant.	Subject of Enquiry.	Result.
July 6	Whickham U.D.C.	Application (1) to increase the number of District Councillors from 15 to 18. (2) to alter the boundaries of the existing Wards of the Urban District, and (3) to allot the number of District Councillors to such Wards.	Granted.
Dec. 13	Stanley U.D.	Proposed amalgamation of the Townships of Stanley, Oxhill and South Moor.	Approved.
	d		

BOROUGHS.

DURHAM.

A. M. VANN, M.R.C.S., Medical Officer of Health.

Vital Statistics.			Infectious Diseases - Cases and	(Death	s).
	1915.	1914.		1915.	1914.
Estimated Population 1	7,550	17,550	Total notifications	94	132
Birth-rate	20.91	26.44	Smallpox	nil	, nil
Death-rate (Crude)	19.77	18.69	Scarlet fever	29	54
Death-rate (Standardized)	19.63	18.56	Diplitheria	17	22
Zymotic death-rate	2.50	1.94	Fevers (Enteric, &c.)	3	9
Phthisis death-rate	1.13	0.85	Puerperal fever	2	4
Total Tuberculosis death-rate	1.36	1.31	Cases treated at hospital	31	64
Respiratory diseases death-			Measles	(21)	(3)
rate	3.93	2.73	Whooping cough	(7)	(6)
Infant mortality-rate per 1,000			Diarrhœa and Enteritis (under	. ,	
births	168	148	2 years)	(12)	(19)

Measles was exceptionally prevalent and fatal.

The work of converting privies into water-closets was continued. At the end of 1915 there were 2,683 W.C.'s, 507 privies, 93 ash closets, and 399 ashpits, the number of privies having been reduced by 118 during the last three years.

Under the Housing Acts 292 dwellings were inspected and 4 Closing Orders were made in respect of houses considered unfit for habitation.

HARTLEPOOL.

GEORGE JUBB, M.D., D.P.H., Medical Officer of Health

Vital Statistics.			Infectious Diseases—Cases and	(Death	is).
	1915.	1914.		1915.	1914.
Estimated Population	18.819	21,130	Total notifications	163	117
Birth-rate	29.01	30.81	Small-pox	nil	nil.
Death-rate (Crude)	19.82	18.08		35	21
Death-rate (Standardized)	20.22	18.45	Diphtheria	12	3
Zymotic death-rate	1:75	0.76	Fevers (Enteric, &c.)	2	nil.
Phthisis death-rate	1'43	0.85	Puerperal fever	nil.	2
Total Tuberculosis death-			Cases treated at Hospital	35	11
rate	1.86	1.09	Measles	(13)	(nil.)
Respiratory diseases death-			Whooping cough	(7)	(3)
rate	3.40	2.79	Diarrhæa and Enteritis (under		
Infant mortality-rate per			2 years)	(6)	(12)
1,000 births	93	130			

There was a satisfactory reduction of the Infant Mortality Rate. The Health Visitor reports that 96 % of the 352 infants visited were breast fed.

Under the Housing Acts 29 dwellings were closed, 17 after purchase by the Corporation, and 9 were subsequently demolished.

Dr. Jubb says:—"The most interesting event of the year was "the holding of a Local Government Enquiry on 3rd March, as a "result of which a Provisional Order was issued empowering the "Corporation to proceed with the Cleveland Street Improvement "Scheme. Most of the preliminaries have now been arranged, and "little remains but to proceed with the building whenever the times "are propitious."

JARROW-ON-TYNE.

J. M. NICOLL, M.B., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (Deaths).
	1 91 5.	1914.		1915.	1914.
Estimated Population	33,466	36,500	Total notifications	445	829
Birth-rate	30.95	32.63	Smallpox	nil	nil.
Death-rate Crude)	22.82	16.85	Scarlet fever	119	474
Death-rate (Standardized)	23.23	17.15	Diphtheria	40	63
Zymotic death-rate	3.64	1.78	Fevers (Enteric, &c.)	6	32
Phthisis death-rate	2.06	1.72	Puerperal fever	nil	nil
Total Tuberculosis death-			Cases treated at hospital	nil	463
rate	2.09	2.41	Measles	(64)	(1)
Respiratory diseases death-			Whooping cough	(14)	(8)
rate	5.46	3.04	Diarrhœa and Enteritis (under	()	(-)
Infant mortality-rate per	- 10	2 0 1	2 years)	(34)	(31)
1,000 births	150	108]	()	()

The Report of the Medical Officer of Health has not been forwarded to the County Council, and the above figures for 1915 are taken from the County Medical Officer's statistics.

STOCKTON.

THOMAS HORNE, M.D., Medical Officer of Health.

Vital Statistics			Infectious Diseases—Cases and (Deaths).	
, , , , , , , , , , , , , , , , , , , ,	1915.	1914.	1915. 1914	ŀ.
Retimated Population	57,882	59,311	Total notifications 564 71	
Birth-rate	28.88	30.20	Smallpox nil ni	
Death-rate (Crude)	18:39	17.71	Scarlet fever 188 32	
Death-rate (Standardized).	18.75	18.05	Dipitolicità	7
Zymotic death-rate	2'40	1.94	Fevers (Enteric, &c.) 13 2	22
Phthisis death-rate	1.12	1.36	Puerperal fever 4	1
Total Tuberculosis death-rate	1.81	2.15	Cases treated at hospital 306 31	-
Respiratory diseases death-			Measles (62)	
rate	3.52	3.24	Whooping cough \dots (11)))
Infant mortality rate per			Diarrhæa and Enteritis (under	_,
1,000 births	127	121	2 years) (43) (47)	7)

Dr. Horne points out that owing to depletion of the sanitary staff there has been a diminished activity in many important sanitary matters, and adds that "In many matters, to 'carry on' "in as effective a manner as circumstances will allow, has been the "sole legitimate abiding ambition."

As regards Maternity and Child Welfare work, he reported that towards the end of the year the Corporation decided to take over the Stockton and Norton Babies' Welcome Society, which has done excellent work, and to establish a Municipal Maternity and Child Welfare Centre. To stimulate public interest in Infant Welfare, the Mayor undertook to present bounties of £5 in the proportion of at least one bounty to every 10 babies submitted, in respect of children born during his year of office as Mayor, and subsequently attaining the age of 1 year, and who were to be chosen by expert judges as most deserving of award.

Not a single death from Enteric Fever occurred in the Borough during the year, and only 13 cases were notified.

Only 79 houses were inspected under the Housing Acts, and Closing Orders were made in respect of two of them.

URBAN DISTRICTS.

ANNFIELD PLAIN.

W. M. MORISON, L.R.C.P., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (Deaths).
	1915.	1914.	1916. 1914.
Estimated Population	18,000	17,700	Total notifications 187 188
Birth-rate	25.72	31.52	Smallpox nil. nil.
Death-rate (Crude)	15.17	15.85	Scarlet fever 23 92
Death-rate (Standardized)	15.52	16.27	Diphtheria 32 21
Zymotic death-rate	1.88	2.10	Fevers (Enteric, &c.) 4 2
Phthisis death-rate	1.38	0.85	Puerperal fever nil. 2
Total Tuberculosis death-rate	2.05	1.41	Cases treated at hospital 50 96
Respiratory diseases death-			Measles (23) (nil.)
rate	2.94	2.20	Whooping cough (ni1.) (10)
Infant mortality-rate per			Diarrhœa and Enteritis (under
1,000 births	137	132	2 years) (8) (17)

Measles was extremely prevalent and fatal.

There was nothing of exceptional sanitary interest in the report, and the following extract from it sums up the situation:—

"It was also on instructions from your Council that during the continuance of the War, no work necessitating structural alterations and costly expenses that could be avoided was to be recommended by this Department. This was kept in view when suggestions were made to remedy defects and sanitary conditions. All other minor defects and complaints were promptly attended to during the year, and with the one exception of the scavenging contracts, which have been under consideration by you, the work of this Department was satisfactorily carried out."

BARNARD CASTLE.

C. H. Welford, M.D., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases a	nd (Deat	hs).
	1915.	1914.		1915.	1914.
Estimated Population	4,206	4,872	Total notifications	145	29
Birth-rate	20.68	18.67	Smallpox	nil.	nil.
Death-rate (Crude)	22.11	13.54	Scarlet fever	10	8
Death-rate (Standardized)	21.13	12.94	Diphtheria		1
Zymotic death-rate	1.66	0.50	Fevers (Enteric, &c.)		_
Phthisis death-rate	0.53	0.85	Puerperal fever		nil.
Total Tuberculosis death-rate	1.42	1.03	Cases treated at hospital	21	6
Respiratory diseases death-			Measles	(2)	(nil.)
rate	4'75	2.05		(1)	(nil.)
Infant mortality-rate per 1,000			Diarrhœa and Enteritis		
births	80	109	(nnder 2 years)	(1)	(1)

Attention was called to the fact that while the quality of the water supply of the town was more satisfactory, the quantity was not always sufficient during the dry summer months, and Dr. Welford considers that the Council should take this matter into serious consideration.

BENFIELDSIDE.

WM. ALLEN, M.D., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (Death	s).
	1915.	1914.		1915.	1914 .
Estimated Population	7,560	8,500	Total notifications	280	113
Birth-rate	28.96	28.12	Smallpox	nil.	nil.
Death-rate (Crude)	17.82	15.29	Scarlet fever	118	40
Death-rate (Standardized)	18.84	16.17	Diphtheria	106	35
Zymotic death-rate	2.91	2.23	Fevers (Enteric, &c.)	7	1
Phthisis death-rate	1.05	1.29	Puerperal fever	nil.	nil.
Total Tuberculosisdeath-rate	1.85	1.88	Cases treated at hospital	169	59
Respiratory diseases death-			Measles	(2)	(nil.)
rate	3.57	2.12	Whooping cough	(1)	(1)
Infant mortality-rate per			Diarrhœa and Enteritis (under	` '	. ,
1,000 births	114	104	2 years)	(3)	(12)

The good work of the Health Visitor is spoken of, and it is stated that the two Mothers' Welcomes recently established in the district are increasingly popular.

During the year the number of water-closets increased from 467 to 506, whilst the ashpit-privies decreased from 703 to 657.

Under the Housing Acts 26 houses were inspected and 2 Closing Orders made, these houses subsequently being put into repair.

BISHOP AUCKLAND.

T. A. McCullagh, M.R.C.S., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and	(Deaths)	
	1915.	1914.		1915.	i914.
Estimated Population 1	4,687	14,687	Total notifications	86	204
Birth-rate	21.57	27.64	Smallpox	\mathbf{nil}	nil
	16.95	13.95	Scarlet fever	42	110
Death-rate (Standardized)	16.68	13.73	Diphtheria	6	18
Zymotic death-rate	2.45	1.63	Fevers (Enteric, &c.)	10	26
Phthisis death-rate	0.92	0.61	Puerperal fever	nil	nil
Total Tuberculosis death-rate	1.36	1.16	Cases treated at hospital	2 1	63
Respiratory diseases death-			Measles	(12)	(nil)
rate	3.26	2.24	Whooping cough	(7)	(5)
Infant mortality-rate per			Diarrhœa and Enteritis (under		
1,000 births	157	142	2 ye ars)	(15)	(16)

During the year 11 ashpit-privies were converted into ashclosets, and 32 into water-closets, but there are still 530 ashpitprivies and 753 ash-closets in the Urban District.

BLAYDON.

H. MORRISON, M.B., B.S., B.Hy., Medical Officer of Health.

Vital Statistics.		Infectious Diseases—Cases and Deat	hs).
1915.	1914.	1915	
Estimated Population 36,327	36,093	Total notifications 327	606
Birth-rate 28.35	31.50	Smallpox nil	nil
Death-rate (Crude) 13.48	13.82	Scarlet fever 152	394
Death-rate (Standardized) . 14.29	14.6g	Diphtheria 64	43
Zymotic death-rate 1.92	2.05	Fevers (Enteric, &c.) 6	30
Phthisis death-rate 0.49	0.83	Puerperal fever 2	4
Total Tuberculosis death-rate 0.90	1.19	Cases treated at hospital nil	?
Respiratory diseases death-		Measles (35)	(3)
rate 2.91	1.69	Whooping cough (3)	(13)
Infant mortality-rate per 1,000		Diarrhæa and Enteritis (under	
births 134	146	2 years) (16)	(41)

The above figures are taken from the County Medical Officer's returns.

Sixty-three new houses were built and all were provided with water-closets. The total number of various types of sanitary conveniences are as follows: Water-closets, 1,624; ash-closets, 3,188; privy middens, 1,025. 188 notices were served to convert privy middens into water-closets, but owing to the shortage of water the notices were not put in force.

BRANDON AND BYSHOTTLES.

HENRY SMITH, M.D., Medical Officer of Health.

Vital Statistics.			Infectious Diseases-Cases and	(Death	s).
	915.	1914.		1 915.	1914.
Estimated Population 18.	,935	18,612	Total notifications	107	158
	0.83	32.02	Smallpox	nil	nil
Death-rate (Crude) 1	7.32	14.56	Scarlet fever	34	65
Death-rate (Standardized) 18	8.07	15.19	Diphtheria	21	43
Zymotic death-rate	3.82	2.84	Fevers (Enteric, &c.)	9	. 21
	0.63	0.23	Puerperal fever	1	nil
Total Tuberculosis death-rate	0.78	0.91	Cases treated at hospital	52	83
Respiratory diseases death-			Measles	(58)	(nil)
rate	3.38	2.10	Whooping cough	(5)	(4)
Infant mortality-rate per			Diarrhœa and Enteritis (under		
1,000 births	125	134	2 years)	(2)	(32)

Amended plans for a new Isolation Hospital have been submitted to the Local Government Board.

Measles was most seriously epidemic, causing an exceptionally high mortality.

Under the Housing Acts 284 houses were inspected but no Closing Orders were made, though defects were remedied in 26. At Brandon Colliery 25 two-roomed houses are reported to have been converted into 4-roomed dwellings.

CHESTER-LE-STREET.

D. DUNCAN, M.B., Medical Officer of Health.

Vital Statistics.		Infectious Diseases—Cases and (Dec	iths).
1915	5. 1914.	191	5. 1914.
Estimated Population 14,09	15,827	Total notifications 126	206
Birth-rate 27.60	29.72	Smallpox nil.	nil.
Death-rate (Crude) 16'18	3 14 .53	Scarlet fever 49	9 123
Death-rate (Standardized) . 16.3	3 14.71	Diphtheria 11	. 13
Zymotic death-rate 3.5	4 3.09	Fevers (Enteric, &c.) 22	20
Phthisis death-rate 0.7	8 0.63	Puerperal fever nil.	nil.
Total Tuberculosis death-rate 11	3 1.32	Cases treated at Hospital 55	80
Respiratory diseases death-		Measles (31) (nil.)
rate 2.6	9 2.21	Whooping cough (6	(9)
Infant mortality-rate per		Diarrhœa and Enteritis (under	
1,000 births 120	6 155	2 years) (7)	(28)

With regard to the cases of Enteric Fever, it is stated that the majority of cases is a legacy of the outbreak of the previous year when the water supply was irregular and insufficient. Seven cases were due to gross carelessness and overcrowding.

Measles was very fatally prevalent.

The agreement between the Durham, etc., Joint Hospital Committee and the Chester-le-Street Joint Hospital Board for the use of the Smallpox Hospital at Shineliffe was approved of by the Local Government Board and came into force on the 1st September.

The erection of 50 new houses under the Housing Acts has been greatly retarded by the want of workmen, and only eight were completed and occupied during the year, the rents varying from 6/9 to 7/9 per week.

CONSETT.

A. D. M. MACINTYRE, M.B., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (Deaths).
, , , , , , , , , , , , , , , , , , , ,	1915.	1914.		1915.	1914.
Estimated Population	11,733	11.898	Total notifications	224	114
Birth-rate	24.54	30.92	Smallpox	nil	nil
Death-rate (Crude)	17.98	19.24	Scarlet fever	139	47
Death-rate (Standardized)	19:24	20.61	Diphtheria	56	40
Zymotic death-rate	2.81	4:37	Fevers (Enteric, &c.)	nil	nil
Phthisis death-rate	0.93	0.50	Puerperal fever	nil	nil
Total Tuberculosis death-rate	1.35	0.68	Cases treated at hospital	161	63
Respiratory diseases death-			Measles	(3)	(nil)
rate	3.66	3.61	Whooping cough	(3)	(21)
Infant Mortality-rate per 1,000)		Diarrhœa and Enteritis (under		. ,
births	118	193	2 years)	(4)	(19)

Only 16 new houses were erected during the year. Waterclosets and impervious yard spaces were provided in every case. There has been a decrease of overcrowding as the result of the enlistment of a portion of the male population.

With regard to the conversion of ashpit-privies and ash-closets into water-closets, in a number of cases where the privies were not insanitary, the Council laid the new drains free of charge and contributed £1 towards the cost of each conversion.

One of the two cowsheds in the district was found to be in an insanitary condition and was ordered to be closed.

CROOK.

A. MACKAY, M.D., Medical Officer of Health.

Vital Statistics.		Intectious Diseases—Cases and		
1915.	1914.		1915.	1914.
Estimated Population 12,000	12,500	Total notifications	194	142
Birth-rate	27.60	Smallpox	nil	nil
Death-rate (Crude) 16.80	14.08	Scarlet fever	85	45
Death-rate (Standardized) 17:03	3 14938	Diphtheria	66	44
Zymotic death-rate 4'41	1.12	Fevers (Enteric, &c.)	3	4
Phthisis death-rate 0.83	3 1.28	Puerperal fever	1	4
Total Tuberculosis death-rate 1.16	3 1:44	Cases treated at hospital	118	79
Respiratory diseases death-		Measles	(19)	(nil)
rate 2.58	3 2.24	Whooping cough	(5)	(2)
Infant mortality-rate per		Diarrhœa and Enteritis (under		` '
1,000 births 129	130	2 years)	(15)	(8)

Dr. Mackay believes direct infection, probably at schools, was the source of the spread of Diphtheria. At one school, where there was a severe outbreak amongst children belonging to one standard, swabs were taken from suspicious throats, while the school holidays were extended and the classrooms thoroughly disinfected, with the result that the number of notified cases rapidly decreased. Fifty-four cases of Diphtheria were isolated in hospital.

The substitution of water-closets for ash-privies, where the contents of these conveniences are wheeled through passages and deposited in the front streets by the scavengers, is strongly urged.

Improvements to dwelling houses at Mount Pleasant, Free-holders' Homes, Roddymoor and Grahamsley are noted.

FELLING.

WM. E. PEACOCK, M.D., B.Hy., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (Deaths).
	1915.	1914.	1915. 1914.
Estimated Population	25.910	25,910	Total notifications 246 337
Birth-rate	29.13	31:99	Smallpox nil. nil.
Death-rate (Crude)	18.75	17:40	Scarlet fever 109 225
Death-rate (Standardized)	19:00	17.63	Diphtheria 1 9
Zymotic death-rate	2:31	2.73	Fevers (Enteric, &c.) 3
Phthisis death-rate	1.38	1:39	Puerperal fever 1 1
Total Tuberculosis death-rate	1.81	2.16	Cases treated at hospital 111 228
Respiratory diseases death-			Measles (23) (21)
rate	3.23	3.01	Whooping cough (nil.) (7)
Infant mortality-rate per			Diarrhœa and Enteritis (under
1,000 births	1 2 3	106	2 years) (33) (16)
· · · · · · · · · · · · · · · · · · ·			

During the year, from the spring until October, a Military Camp was located in the district, with a total strength of 3,860 men. Arrangements were made for the disposal of all refuse before the brigade marched in, and the Council undertook the cleansing of all latrines. The health of the Camp was excellent and no cases of infectious disease occurred during their 5 months' stay. Some thousands of articles were disinfected for the military authorities at the Isolation Hospital.

HEBBURN.

E. E. NORMAN, M.B., B.S., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (Deaths).	
	1915.	1914.	1915.	1914.
Estimated Population	23,580	23,580	Total notifications 283	585
Birth-rate	31.76	33.29	Smallpex nil	nil
Death-rate (Crude)	15.90	15:39	Scarlet fever 109	353
Death-rate (Standardized)	16.64	16.11	Diphtheria 11	38
Zymotic death-rate	2.12	2.97	Fevers (Enteric, &c.) 9	16
Phthisis death-rate	1:31	1.65	Puerperal fever nil	nil
Total Tuberculosis death-rate	1.90	2.37	Cases treated at hospital 125	351
Réspiratory diseases death-			Measles (21)	(29)
rate	3'47	2:33	Whooping cough (1)	(9)
Infant mortality-rate per			Diarrhæa and Enteritis (under	. /
1,000 births	109	111	2 years)	(21)

It is stated that the population remains the same as the previous year, a large influx of new residents, mainly munition workers, having made good the loss of a large number of men entering the military and naval services.

The infant-mortality rate was the lowest on record.

A case of Typhus Fever occurred in December, but there was no spread of the disease from the original patient. The source of infection could not be ascertained.

The shortage of houses and consequent congestion and over-crowding continues to be very marked. The housing conditions were carefully enquired into by one of the Local Government Board Inspectors. The Board subsequently suggested to the District Council that they should consider the advisability of preparing a scheme for the erection of houses by themselves under Part III. of the Housing of the Working Classes Act, 1890.

The Inspector of Nuisances having resigned, Mr. Robert Mc-Kellar was appointed in his place.

HETTON-LE-HOLE.

J. Adamson, M.D., Medical Officer of Health.

Vital Statistics.			Infectious Diseaces—Cases and (Deaths).
	1915.	1914.	1915. 1914.
Estimated Population	16,300	16,200	Total notifications 328 290
Birth-rate	34.60	36.35	Smallpox nil nil
Death-rate (Crude)	17.55	17.77	Scarlet fever 39 199
Death-rate (Standardized)	17.53	17.75	Diphtheria 33 . 32
Zymotic death-rate	2.20	2.71	Fevers (Enteric, &c.) 8 22
Phthisis death-rate	1.10	1.11	Puerperal fever nil nil
Total Tuberculosis death-rate	5.05	1:66	Cases treated at hospital 47 83
Respiratory diseases death-			Measles (11)
rate	2.82	2.71	Whooping cough (10) (19)
Infant mortality-rate per 1,000	•		Diarrhœa and Enteritis (under
births	15 2	168]. 2 years) · : (11)

The necessity for providing additional dwelling houses in the district is strongly urged as "it is well known to you that at the "present time your officers are seriously handicapped and have been for years in enforcing Closing Orders, as there is no place for the occupants of a house on which a Closing Order has been served can go. . . . I would suggest that what is necessary is that your Council erect a considerable number of houses to be let at a "rental suitable for the pocket of the working man. This would mark the beginning of an undertaking which would do much for the improved health and comfort of the inhabitants of the district; better houses are calculated to have a moral as well as "physical effect on those benefitting thereby."

The Inspector of Nuisances in his report refers to the advisability of finding new refuse tips in the near future, and also regrets that his Council did not decide to buy any specially-constructed carts for the removal of house refuse. The carts at present in use appear to be unsatisfactory and their use in hot weather and on windy days is objectionable.

HOUGHTON-LE-SPRING.

D. S. PARK, F.R.C.S., Medical Officer of Health.

Vital Statistics.		. Infectious Diseases—Cases and (Deaths)
	1915. 1914.	1915. 1914.
Estimated Population	10,619 10,619	Total notifications 62 226
Birth-rate	27.21 30.98	Smallpox nil nil
Death-rate (Crude)	17:04 16:38	Scarlet fever 26 155
Death-rate (Standardized)	16.72 16.32	Diphtheria 11 18
Zymotic death-rate	1.78 3.20	Fevers (Enteric, &c.) 5 22
Phthisis death-rate	0.94 1.13	Puerperal fever nil nil
Total Tuberculosis death-rate	1.31 1.35	Cases treated at hospital 24 43
Respiratory diseases death-		Measles (2) (nil)
rate	4.23 2.55	
Infant mortality-rate per		Diarrheea and Enteritis (under
1,000 births	148 176	2 years) (5)

The Report for the first half of the year was prepared by Dr. Park, and for the latter half by Dr. Condell, Dr. Park having retired.

The 52 houses erected during the year by the District Council, under Part III. of the Housing of the Working Classes Act, 1890, were all occupied.

Owing to subsidences, the sewage farm was not in a satisfactory condition.

Owing to delay on the part of the owner in making habitable 19 houses in Pit Row, Closing Orders were served, and it is stated that the owners are now engaged on the work which when completed will greatly improve the sanitary condition of this street.

LEADGATE.

WM. ALLEN, M.D., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (Deaths).
	915.	1914.	1915. 1914.
Estimated Population 4.	,791	5,000	Total notifications 90 71
Birth-rate 30	0.45	31.00	Smallpox nil nil
Death-rate (Crude) 18	8:37	17.20	Scarlet fever 58 53
Death-rate (Standardized) 1	8.45	17.27	Diphtheria 12 7
Zymotic death-rate	2.08	3.40	Fevers (Enteric, &c.) nil nil
Phthisis death-rate (0.83	0.40	Puerperal fever nil nil
Total Tuberculosis death-rate	1.25	1.00	Cases treated at hospital 60 58
Respiratory diseases death-			Measles: (2) (nil
	2.50	1.40	Whooping cough (nil) (5)
Infant mortality-rate per 1,000			Diarrhœa and Enteritis under
births	164	180	2 years) (7)

The whole of the district is stated to have been inspected but the continuance of the War prevented the Council taking any steps except in cases where immediate repairs were necessary.

Under the Housing Acts 157 dwellings were inspected; no Closing Orders were made but in 23 cases defects were remedied without the making of Closing Orders. There are stated to have been more cases of overcrowding than usual during the year.

RYTON.

JAMES W. SMITH, M.D., Medical Officer of Health.

Vital Statistics.			Infectious Diseases - Cases and (Deaths).
	1915.	1914.	1915. 1914.
Estimated Population	13,256	14.250	Total notifications 162 250
Birth-rate	31.60	29:82	Smallpox nil nil
Death-rate (Crude)	13.27	11.64	Scarlet fever 76 151
Death-rate (Standardized)	13.35	11.72	Diphtheria 49 34
Zymotic death-rate	2.64	1.47	Fevers (Enteric, &c.) 10 14
Phthisis death-rate	0.25	0.56	Puerperal fever nil 1
Total Tuberculosis death-rate	1.05	0.91	Cases treated at hospital 65 112
Respiratory diseases death-			Measles (25) (nil)
rate	1.50	1.33	Whooping cough (2)
Infant mortality-rate per 1,000)		Diarrhœa and Enteritis (under
births	97	108	2 years) (2)

The report states that the Registrar-General's estimate of population (11,286) is very much too low owing to the influx of munition and other workers, and in calculating the death-rates a population of 13,256 has been taken.

Of the 41 infantile deaths, 21 occurred during the first month of life and 16 during the first week. The importance of effective steps being taken as regards child welfare, including the establishment of pre-maternity hospitals, is urged.

Measles was extremely fatal and was the most serious epidemic in the experience of the Medical Officer of Health. It is pointed out that while it may not be easy to prevent the spread of Measles, much could be done in preventing cases having a fatal termination, especially if careful nursing is provided.

Of the 57 new houses built and occupied, 50 were provided with W.C.'s, and it is urged that every house, where possible, should be provided with water carriage.

SEAHAM HARBOUR.

LUKE G. DILLON, M.D., Medical Officer of Health.

Vital Statistics.		Infectious Diseases—Cases and (Deaths).		
	1915.	1914.	1915. 19	14.
Estimated Population	18,700	18,500	Total notifications 73	91
Birth-rate	29.67	32.59	Smallpox nil. 1	nil.
Death-rate (Crude)	16.47	13.24	Scarlet fever 21	18
Death-rate(Standardized)	16.93	13.61	Diphtheria 8	3
Zymotic death-rate	2.56	1.62	Fevers (Enteric, &c.) 1	22
Phthisis death-rate	1.06	1.08	Puerperal fever nil. 1	nil.
Total Tuberculosis death-rate	1.44	1.46	Cases treated at hospital 6	2 6
Respiratory diseases death-			Measles (17)	nil)
rate	4.06	2.87	Whooping cough (4)	nil)
Infant mortality-rate per			Diarrhea and Enteritis (under	
1,000 births	162	122	2 years) (22)	(23)

There was a considerable rise in the Infant Mortality Rate and 39 of the deaths were in consequence of prematurity, congenital debility, and imperfect development.

The services of the County Health Visitor are eulogised.

The District Council has resolved that all new buildings must in future be provided with water-closets where possible.

SHILDON.

L. C NASH, L.R.C.S., Medical Officer of Health.

Vital Statistics.		Infectious Diseases—Cases and (Deaths).	
1915.	1914.	1915. 1914	
Estimated Population 12,974	14,103	Total notifications 108 13	3
Birth-rate 29.89	32.33	Smallpox nil. nil	
Death-rate (Crude) 18.26	15.31	Scarlet fever 35 4	4
Death-rate (Standardized) 18.17	15.23	Diphtheria 20 2.	5
Zymotic death-rate 1.77	2.36	Fevers (Enteric, &c.) 8 1	3
Phthisis death-rate 0.84	0.49	Puerperal fever nil. nil	1.
Total Tuberculosis death-rate 1:46	1.13	Cases treated at hospital 61 4	6
Respiratory diseases death-		Measles (17) (nil.	.)
rate 3:31	2.45	Whooping cough (3) (13	
Infant mortality-rate per		Diarrhea and Enteritis (ander	,
1,000 births 141	142	2 years) (1) 16	3)

Of the 55 deaths of infants under 1 year, 25 were certified as being due to premature birth and congenital debility, and Dr. Nash says no doubt a goodly proportion are due to weakly parents, insanitary surroundings, and improper feeding and has the opinion that syphilis plays its part in this mortality.

The high mortality from Measles is commented upon and also the carelessness and ignorance of parents with patients in not protecting the latter from complications which are so often fatal after an attack of this diseasee.

Special reference is made in the report to the increase in the prevalence of Syphilis.

The owner of 8 houses in Hardy's Row and one in Back Queen Street appealed against Closing Orders being made by the District Council, but after a Local Government Board Enquiry, the Closing Orders were confirmed but they have not yet been enforced. The houses in Pit Row are reported to be unfit for habitation.

Reference is made to the good work accomplished by the County Health Visitor.

The installation of water-closets in place of ashpit-privies is specially recommended and also the abolition or alteration of 2-roomed back-to-back houses.

SOUTHWICK-ON-WEAR.

JOHN J. CARRUTHERS, M.B., Medical Officer of Health.

Vital Statistics.		1	Infectious Diseases Cases and (Deaths).
	1915.	1914.	1915 1914.
Estimated Population	13,634	14,183	Total notifications 100 133
Birth-rate	31.76	35 .6 0	Smallpox nil. nil.
Death-rate (Crude)	19:43	16.92	Scarlet fever 45 85
Death-rate (Standardized)	20.05	17:47	Diphtheria 8 9
Zymotic death-rate	1.83	1.90	Fevers (Enteric, &c.) 3 2
Phthisis death-rate	0.95	0.84	Puerperal fever nil. nil.
Total Tuberculosis death-rate	1.61	1.62	Cases treated at hospital 42 69
Respiratory diseases death-			Measles (7) (nil.)
rate	3.66	3.03	Whooping cough (nil.) (6)
Infant mortality-rate per		The state of the s	Diarrhœa and enteritis (under
1,000 births	150	144	2 years) (15) (13)

All the cases of Enteric Fever and 87% of the cases of Scarlet Fever were isolated in hospital.

Privy-middens to the number of 47 were abolished and the water-carriage system substituted.

The provision of a public slaughter-house is recommended.

SPENNYMOOR.

W. Mussellwhite, M.R.C.S., D.P.H., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (Deaths).
	1915.	1914.	1915. 1914.
Estimated Population 1	16,785	18,340	Total notifications 230 150
Birth-rate	3 3·12	35.21	Smallpox nil. nil.
Death-rate (Crude)	18.58	17.23	Scarlet fever 151 69
Death-rate (Standardized)	20.35	17.39	Diphtheria 10 11
Zymotic death rate	2.50	2.83	Fevers (Enteric, &c.) 3 15
Phthisis death-rate	1.19	0.85	Puerperal fever 1 nil.
Total Tuberculosis death-rate	1.54	1.47	Cases treated at hospital 107 96
Respiratory diseases death-			Measles (15)
rate	3.69	2.29	Whooping cough (4) (nil.)
Infant mortality-rate per			Diarrhœa and Enteritis (under
1,000 births	122	• 137	2 years) (18) (35)

As the result of an inspection that was made, 13 out of 151 houses were considered unfit for human habitation, but all defects were remedied without the making of Closing Orders.

Two cases of Cerebro-Spinal Fever occurred and were treated in hospital and in one case the infection may have been contracted from soldiers.

Attention is drawn in the report to the unsatisfactory manner in which the scavenging is carried out and it was found impossible to perform the work at nights although, in the contracts, this is required to be done. The District Council are stated to be considering the advisability of themselves undertaking the scavenging of one or two districts with their own staff as an experiment.

STANHOPE.

JOHN GRAY, M.B., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (Deaths).
	1915.	1914.	1915. 1914.
Estimated Population .	1,792	2,000	Total notifications 24 32
Birth-rate	23.99	18.00	Smallpox nil. nil.
Death-rate (Crude)	16.12	15.00	Scarlet fever 4 17
Death-rate (Standardized)	14.96	13.92	Diphtheria 18 14
Zymotic death-rate	nil.	0.20	Fevers (Enteric, &c.) nil. nil.
Phthisis death-rate	0.55	0:50	Puerperal fever nil. nil.
Total Tuberculosis death-rate	0.55	1.50	Cases treated at hospital 18 20
Respiratory diseases death-			Measles (nil.) (nil)
rate	1.11	2.00	Whooping cough (nil.) (1)
Infant mortality-rate per			Diarrhæa and Enteritis (under
1,000 births	93	166	2 years) (nil.) (nil)

Under the Housing (Inspection of District) Regulations, 1910, 52 houses were inspected and none were found unfit for habitation. It was stated that on the whole, the houses of the working classes compare very favourably with other towns of this size.

The water reservoir which under normal conditions contains sufficient for one day's supply only, was cut off morning and evening for a short period during the drought as a precautionary measure. The supply is obtained from several moorland springs.

STANLEY.

E. G. D. BENSON, L.R.C.P., D.P.H., Medical Officer of Health.

Vital Statistics.			Infectious Diseases-Cases and (Death	s).
1	915.	1914.	1915.	1914.
Estimated Population 28,	,000	27,300	Total notifications 330	227
Birth-rate 29	8.50	33.77	Smallpox nil.	nil.
Death-rate (Crude) 13	3.82	14.54	Scarlet fever 165	109
Death-rate (Standardized) 1-	4.86	15.64	Diphtheria 35	18
Zymotic death-rate :	2.60	1.46	Fevers (Enteric, &c.) nil.	5
Phthisis death-rate (0.46	0.73	Puerperal fever nil.	4
	1.00	1.24	Cases treated at hospital 206	138
Respiratory diseases death-		•	Measles (36)	(nil.)
	3.10	2.56	Whooping cough (8)	(2)
Infant mortality-rate per			Diarrhea and Enteritis (under	
	130	150	2 years) (16)	(27)

There was an increase in the number of new houses erected during the year from 61 in 1914 to 104.

During the year 81 ash-closets were converted into water-closets.

Under the Housing Act Regulations 246 houses were inspected, 32 were found to be unfit for human habitation, 31 were voluntarily closed permanently, and in 32 dwelling houses the necessary repairs were made without Closing Orders being necessary.

TANFIELD.

E. G. D. BENSON, L.R.C.P., D.P.H., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (Deaths)
	1915.	1914.	1915. 1914.
Estimated Population	10,935	10,800	Total notifications 143 117
Birth-rate	24.87	31 '20	Smallpox nil nil
Death-rate (Crude)	12.93	12.59	Scarlet fever 47 30
Death-rate (Standardized)	13.39	12.99	Diphtheria 21 27
Zymotic death-rate	0.73	1.85	Fevers (Enteric, &c.) 2 6
Phthisis death-rate	0.73	0.37	Puerperal fever 1 nil.
Total Tuberculosis death-rate	1.37	0.22	Cases treated at hospital 69 61
Respiratory diseases death-			Measles (3) (nil)
rate	2.01	1.66	Whooping cough (nil) (4)
Infant mortality-rate per 1,000)		Diarrhœa and Enteritis
births	132	166	(under 2 years) (1) (14)

It is stated that "the Tuberculosis Dispensary at Stanley has "proved a great boon to the district, not only for the treatment "patients receive, but also for the bringing home to the people the "precautions to be observed for the prevention of the dissemination "of the disease."

Of the 65 houses inspected under the Housing Acts, 19 were condemned as totally unfit for habitation. 46 houses were made habitable without Closing Orders being necessary.

During the year 52 privies were abolished, the water-carriage system being introduced where suitable.

TOW LAW.

J. H. NAISMITH, M.D., Medical Officer of Health.

Vital Statistics.			Infectious Diseases - Cases and (Deaths).	
	1915.	1914.	1915. 191	.4.
Estimated Population	4,304	4,327	Total notifications 81	13
Birth-rate	23.00	31.89	Smallpox nil r	nil
Death-rate (Crude)	14.86	10.16	Scarlet fever 70	5
Death-rate (Standardized)	14.94	10.22	Diphtheria 4	2
Zymotic death-rate	0.92	0 .6 9	Fevers (Enteric, &c.) 2 n	il
Phthisis death-rate	C.23	0.46	Puerperal fever 2 n	ıil
Total Tuberculosis death-rate	0.46	0.46		6
Respiratory diseases death-			Measles (nil) (n	il)
rate	2.78	1.16	Whooping cough (nil) (nil)	il)
Infant mortality-rate per 1,000			Diarrhœa and Enteritis	
births	141	43	(under 2 years) (1)	2)

The figures for 1915 given above are taken from the County Medical Officer's returns.

The ash-privy system is still very pronounced in this district and it is stated that "The water-carriage system has not made "much advance, neither can we possibly expect it."

Many of the back streets are stated to be in a deplorable condition during bad weather.

WHICKHAM.

ANDREW SMITH, M.D., Medical Officer of Health.

Viţal Statistics.	Infectious Diseases-Cases and (Deaths).
1915. 1914.	1915. 1914.
Estimated Population 18,898 20,575	Total notifications 154 248
Birth-rate 28:20 26:73	Smallpox nil nil
Death-rate (Crude) 14:02 12:72	Scarlet fever 70 116
Death-rate (Standardized) 14.91 13.53	Diphtheria 35 65
Zymotic death-rate 2:06 1:50	Fevers (Enteric, &c.) 3 4
Phthisis death-rate 0.79 1.45	Puerperal fever nil 2
Total Tuberculosis death-rate 1:48 1:89	Cases treated at hospital 73 115
Respiratory diseases death-	Measles (21)
rate 2.27 1.60	Whooping cough (10)
Infant mortality-rate per 1,000	Diarrhœa and Enteritis
births 125 114	(under 2 years) (4) (15)

Dr. Smith thinks the compulsory notification of Measles will be effective in lessening its mortality.

As regards infant mortality, a great reduction is expected from the establishment of Child Welfare Centres, especially if, in association with them, residence for a time in hospitals under specially skilled nurses can be secured. A Cottage Hospital in the district, as soon as Peace is established, is strongly urged.

It is stated that overcrowding, especially at Dunston, has become aggravated owing to munition workers residing in the district, while house building has been almost totally in abeyance. Owing to shortage of labour the work of abolishing back-to-back houses has made very little progress and nothing has been done towards making up the roads and streets.

WILLINGTON.

R. E. Brown, L.R.C.P., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (Deaths).	
	1915.	1914.	1915. 1914	ŀ.
Estimated Population	8,796	9,029	Total notifications 25 3	2
Birth-rate	27.85	29.90	Smallpox nil ni	il
Death rate (Crude)	15.34	11.83	Scarlet fever 11 1	6
Death-rate (Standardized)	15.59	12.02	Diphtheria 9	2
Zymotic death-rate	2.16	1.33	Fevers (Enteric, &c.) 2	1
Phthisis death-rate	0.54	0.55	Puerperal fever nil ni	1
Total Tuberculosis death-rate	0.68	0.44	Cases treated at hospital 21 1	7
Respiratory diseases death-			Measles (11) (nil)
rate	2.16	2.10	Whooping cough (4) (nil)
1nfant mortality-rate per 1,000			Diarrhœa and Enteritis	
births	97	12 2	(under 2 years) (3))

It is reported that the scavenging has been at times inadequately performed owing, it is stated, to shortage of labour.

Under the Housing Acts, 196 houses were inspected. None were considered unfit for habitation and in 24 cases defects were remedied.

54 ash-closets and 14 water-closets were provided in place of midden-privies, and the abolition of all midden-privies in the district is urged as well as improvements in the housing accommodation and the making, paving, and channelling of the private streets.

RURAL DISTRICTS.

AUCKLAND RURAL DISTRICT.

T. C. Penfold, M.B., D.P.H., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (Deaths).
	1915.	1914.	1915. 1914.
Estimated Population	67,644	60,055	Total notifications 661 814
Birth-rate	25.61	33.38	Smallpox nil. nil.
Death-rate (Crude)	14.26	15.20	Scarlet fever 381 537
Death-rate (Standardized)	14.42	15.67	Diphtheria 85 94
Zymotic death-rate	2:42	2.51	Fevers (Enteric, &c.) 33 58
Phthisis death-rate	0.62	0.28	Puerperal fever 7 3
Total Tuberculosis death-rate	1.00	0.93	Cases treated at hospital 351 445
Respiratory diseases death-			Measles (69) (31)
rate	2.66	2.11	Whooping cough (6) (15)
Infant mortality-rate per			Diarrhœa and Enteritis
1,000 births	135	133	(under 2 years) (41) (66)

Under the Housing Acts, 2,004 houses were inspected and as a result 60 Representations were made to the local authority, and the same number of Closing Orders made. Three houses were voluntarily closed while in a number of instances the necessary repairs were made without the Closing Orders having been made operative.

Three back streets at Howden-le-Wear have been paved with impervious material under the Private Street Works Act.

1,136 notices were served in respect of nuisances, but in only 544 cases were the nuisances abated as it was found practically impossible to obtain men to do the work required.

No reference is made in the report to the causes, etc., of the Enteric Fever cases.

BARNARD CASTLE RURAL DISTRICT.

JAMES C. NELIGAN, L.R.C.S., Medical Officer of Health.

Vital Statisties.		[Infectious Diseases—Cases and (Deaths)).
1915.	1914.	1915.	1914.
Estimated Population 11,378	12,027	Total notifications 85	279
Birth-rate 23.90	21.61	Smallpox nil	nil
Death-rate (Crude) 17:40	14.05	Scarlet fever 70	237
Death-rate (Standardized) 16.52	13.35	Diphtheria 3	20
Zymotic death-rate 0.52	0.75	Fevers (Enteric, &c.) 1	nil
Phthisis death-rate 0.43	0.66	Puerperal fever 2	nil
Total Tuberculosis death-rate 0.61	0.83	Cases treated at hospital 43	174
Respiratory diseases death-		Measles (1)	(1)
rate 2.28	0.91	Whooping cough (3)	(1)
Infant mortality-rate per 1,000		Diarrhœa and Enteritis	
births 113	100	(under 2 years) (nil)	(1)

Under the Housing Acts 44 dwelling houses were inspected and 3 Closing Orders made as the result of Representations relating to houses considered to be unfit for habitation. Nine houses were made habitable following the making of Closing Orders.

There was frequent shortage of water at Cockfield owing to the pipes being frequently fractured by colliery subsidences. The water supply at Newbiggin was quite inadequate during the summer and "a more plentiful supply should be obtained before "another dry season occurs."

The report states that there is at present a sufficiency of good and habitable houses for working men in the district.

Improvements to the sewage tank at Whorlton are reported.

CHESTER-LE-STREET RURAL DISTRICT.

JOHN TAYLOR, M.D., D.P.H., Medical Officer of Health.

Vital Statistics.			Infectious Diseases-Cases	and ((Deaths).
	915.	1914.			1915.	1914.
Estimated Population 67,	194 6	37,194	Total notifications		851	1,108
	0.46	33.42	Smallpox		nil.	nil.
Death-rate (Crude) 15	5.93	14.40	Scarlet fever		450	726
	5:55	14.92	Diphtheria		151	89
	3.24	2.59	Fevers (Enteric, &c.)		8	33
	.14	0.55	Puerperal fever		5	5
Total Tuberculosis death-rate 1	.77	1.05	Cases treated at hospital		346	375
Respiratory diseases death-			Measles		(110)	(3)
	2:56	1.99	Whooping cough		(30)	(23)
Infant mortality-rate per			Diarrhœa and Enteritis			(0.5)
	136	141	(under 2 years)	• •	(36)	(95)

The estimated population was stated to be undoubtedly high, but if the population is that estimated by the Registrar-General, the death-rate would be 17'47 per 1,000 living. It is pointed out that the Infant Mortality Rate has decreased from 175'5 per 1,000 births during the 20 years ended 1905 to 149'5 during the 10 years ended 1915. Dr. Taylor thinks that the chief causes of infant mortality are want of proper care of the very young infant and intemperance, and on this subject he states "I do not hesitate to "say that the reduction of infant loss by death has been chiefly "effected by the Health Visitor, more, I think, by her presence "than by her preaching. Every individual is prone to promise "reform and retrenchment, but not so many are inclined to per-"form such unless they have some moral force behind them, push-"ing them on to keep their promises.

"The knowledge that the Health Visitor is coming, and the "shame engendered to let the lady see the children untidy and the "house dirty, spurs the sloven to keep the house clean and the "children free from dirt and vermin."

"To further reduce the deaths of children, authorities must improve the house and its surroundings and improve the moral of the people, and chiefly the moral of the slovenly parent by the Health Visitor, and to do this effectively the Health Visitors must be increased in numbers so that visits may be made to each house at least weekly, and so provide proper supervision, not only for the newly-born child or infant of a few months old, but for older children, so that those children may be taught cleanliness in person and clothes."

As regards the prevention of Tuberculosis, Dr. Taylor expresses the opinion that up to now sanatorium treatment has been of doubtful benefit and not worth the time or the money spent on it, and on this subject he says "The larger portion of the patients" do not appreciate in the least the money and effort spent on them, "and really appear to consider that they are conferring a huge "benefit on sanatoria, when they become patients therein.

"For educational purposes two month's residence in a sana-"torium, and only once for any one patient, is all the sanatorium "treatment which should be meted out to anyone. Let those "patients be supervised in their own homes, but the supervision "must be frequent; let some of the money now spent with doubt"ful results on sanatoria be spent on the home life of the patient,
"and I am confident that in a generation much more will be done
"to stamp out tubercle than sanatoria, with all their usefulness,
"will or can do.

"Yet what is the use of thinking or talking of the stamping out of tubercle, when one of the chief sources of tubercle, that is tubercular infected milk, is allowed to be sold broadcast daily without any real attempt being made to eradicate tubercle in the animals producing the milk."

Measles caused a very heavy mortality, and Dr. Taylor says: "To control Measles and save life, to notification must be added "isolation in hospital of the worst cases, either by their surround-"ings or virulence, and in other cases daily visitation by Health "Visitors. That means a huge number of visitors during an epi-"demic. Nor do I think this will lessen the number of cases of "Measles, but such control might, if anything would, decrease the "number of deaths, for inefficient nursing is a potent cause of death "from Measles."

The number of cases of Enteric Fever (8) was the lowest on record.

Diphtheria increased in prevalence, and the opinion is expressed that it is spread by mild unrecognised cases and by "carriers," and probably school life is a factor in the dissemination of the disease, though the school buildings, Dr. Taylor firmly believes, were not the cause of the continued prevalence of Diphtheria in the district.

Scavenging was repeatedly neglected in the Ouston, Urpeth, and Birtley areas, and the penalty for neglect was imposed upon the contractors on several occasions.

Details of the sanitary improvements effected in the individual districts are given.

Houses unfit for habitation were closed in the townships of Harraton (5), Lamesley (3), Washington (5), Usworth (6), Pelton (25), and Edmondsley (1). It is stated in the report that "There are yet "numerous dwelling houses unfit for habitation, though used as "such, but the state of War now prevailing has prevented much "from being done to improve such houses."

At the Isolation Hospital a number of cases of Measles occurring among soldiers were treated and all recovered.

DARLINGTON RURAL DISTRICT.

ROBERT H. MEIKLE, M.B., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (Deaths).
	1915.	1914.	1915. 1914.
Estimated Population :	10,000	10,914	Total notifications 76 63
Birth-rate	21.00	22.54	Smallpox nil. nil
Death-rate (Crude)	15.40	14.02	Scarlet fever 21 23
Death-rate (Standardized)	14.08	12.74	Diphtheria 14 17
Zymotic death-rate	0.60	0.73	Fevers (Enteric, &c.) 4 1
Phthisis death-rate	0.60	0.73	Puerperal fever nil. nil.
Total Tuberculosis death-rate	1.20	1.55	Cases treated at hospital 27 26
Respiratory diseases death-			Measles (2) (nil.)
rate	2.30	1.74	Whooping cough (1) (6)
Infant mortality-rate per			Diarrhœa and Enteritis
1,000 births	119	97	(under 2 years) (2) (nil.)

The District Council provides gratuitously anti-toxin serum to medical practitioners.

The opinion is expressed by the Medical Officer of Health that the adoption of the Notification of Births Act is responsible for a certain reduction in infantile mortality, and he says: "The visits "of the Health Visitors are now more eagerly welcomed and not "looked upon as an intrusion, and their advice is conscientiously "put into practice. Enquiries I have personally made have elicited "the information that their children thrive and do much better "than others who have adopted some old person's advice, and it is "gratifying to be able to report (after investigation) that of the 22 "deaths occurring in your district, not one of them could be "attributed to carelessness or neglect."

A nuisance was caused by the burning of refuse at the Darlington Corporation Tip at Snipe Lane, and up to the end of the year it had not been abated.

Troops were encamped on the Rifle Range at Neasham during the summer, and no disease was introduced into the district or was attributable to the soldiers. The camp was inspected by the Medical Officer of Health, and the suggestions made by him were acted upon.

Under the Housing Acts 70 houses were inspected and the report gives details of the improvements affected. No Closing Orders appear to have been made.

Mr. G. O. Brown was appointed Inspector of Nuisances in succession to Mr. Pallister, who became Sanitary Surveyor.

DURHAM RURAL DISTRICT.

A. T. HARRISON, L.S.A., Medical Officer of Health.

Vital Statistics.		,	Infectious Diseases—Cases and (Deaths).	
	1915.	1914.	1915. 1	914.
Estimated Population 3	2,528	32,147	Total notifications 371	685
	27.36	31.88	Smallpox nil.	nit.
Death-rate (Crude)	14.78	16:39	Scarlet fever 222	533
Death-rate (Standardized)	14.54	16.20	Diphtheria 50	51
Zymotic death-rate	2.70	2.71	Fevers (Enteric, &c.) 7	17
Phthisis death-rate	0.46	0.23	Puerperal fever nil.	1
Total Tuberculosis death-rate	0.76	0.93	Cases treated at hospital 90	241
Respiratory diseases death-			Measles (48)	(3)
rate	2.73	2.88	Whooping cough (5)	(10)
Infant mortality-rate per			Diarrhœa and Enteritis	
1,000 births	130	165	(under 2 years) (21)	(46)

Reference is made to the excellent work of the Health Visitors in preventing child mortality in infancy.

The Surveyor reports improvements in the sewage disposal at Ludworth, Coxhoe Pottery, Springwell, Sherburn and Quarrington Hill, and he also reports improvement in the water supplies of Quarrington Hill, Cassop and East Hetton Districts.

Extensions and improvements at the Isolation Hospital, Houghall, are reported.

The Inspector of Nuisances reports that nothing has been done to the houses in the Belmont Township on which Closing Orders have been made. At South Street, Sherburn, 14 houses

were closed; one has since been made habitable but the other 13 are stated to be in a dangerous condition. Nothing has been done during the year to improve the insanitary houses at Ludworth, as arranged by a Committee of the District Council, and the houses are stated to be in a most insanitary condition and injurious to health.

EASINGTON RURAL DISTRICT.

JAMES ARTHUR, L.R.C.P., D.P.H., Medical Officer of Health.

Vital Statistics.			Infectious Diseases - Cases and (Deaths).
	1915.	1914.	1915. 1914.
Estimated Population .	70,582	69,570	Total notifications 584 858
Birth-rate	31.60	35.36	Smallpox nil. nil.
Death-rate (Crude)	16.54	16.27	Scarlet fever 194 512
Death-rate (Standardized)	17:32	17:05	Diphtheria 56 87
Zymotic death-rate	1.84	2.71	Fevers (Enteric, &c.) 14 33
Phthisis death-rate	0.69	0.75	Puerperal fever 3 nil.
Total Tuberculosis death-rate	1.38	1.46	Cases treated at hospital 87 100
Respiratory diseases death-			Measles (91) (8)
rate	2.93	2:67	Whooping cough (13) (37)
Infant mortality-rate per			Diarrhea and Enteritis
1,000 births	155	157	(under 2 years) (75) (103)

It is probable that the vital statistics based on the estimated population are too low, as the report states that the estimated population includes the men who have left to join the Forces, and the vital statistics take no account of deaths among these.

The infant mortality rate, though shewing a reduction as compared with previous years, was still very much above the County rate.

Measles was very fatal and 91 % of the deaths were those of children under 5 years.

The number of notified cases of Enteric Fever was the lowest ever recorded, and in no instance was any evidence obtainable as to the origin of any case by direct infection or otherwise.

Diarrhœa was very fatal, causing 90 deaths, and of these 90 % were of children under 5 and 72 % were those of infants under 1 year.

As regards Housing, it is stated that the scheme of the District Council to erect 100 houses at Shotton has, for the time being, been abandoned, at the request of the Local Government Board.

An appeal by the owner against Closing Orders made by the District Council in respect of 18 houses in Forster Street, South Hetton, was dismissed after a Local Government Board Enquiry, but owing to scarcity of labour improvements to these houses and others have been delayed.

Closing Orders in respect of 43 houses were made but in many cases have not been enforced owing to the War. 55 houses at South Hetton and Shotton were rebuilt, and 288 at Trimdon, Wheatley Hill, Murton and other parts are reported to have been improved.

Scavenging by contract was unsatisfactorily performed, particularly in the Wingate, Hesleden, Shotton and Seaham Districts, and a substantial sum was deducted from one contractor for neglect.

The question of providing destructors was considered by a special Committee but no definite action was taken.

The new Isolation Hospital was completed during the year and provides excellent acommodation.

Reference is made in the report to the good work performed by the County Health Visitor.

HARTLEPOOL RURAL DISTRICT.

T. G. AINSLEY, M.D., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (De	eaths).
	1915.	1914.	19	15. 1914.
Estimated Population	2,735	3,076	Total notifications	10 11
Birth-rate	21.20	22.43	Smallpox n	il. nil.
Death-rate (Crude)	14.62	9.42	Scarlet fever	4 6
Death-rate (Standardized)	14.06	9.96	75.1 2 42 4	il. 1
Zymotic death-rate	1.09	0.65		3 2
Phthisis death-rate	0.73	0.65		il. nil.
Total Tuberculosis death-rate	1.09	0.65	Cases treated at hospital	3 6
Respiratory diseases death-				3) (nil.)
rate	3.25	0.32		il.) (nil.)
Infant mortality-rate per			Diarrhœa and Enteritis	/
1,000 births	103	144		il.) (nil.)

An outbreak of Enteric Fever (4 cases) occurred at the Work-house in January, and the water was found to be contaminated.

Troops were billeted in different parts of the district during the year, and no case of infectious disease was reported amongst them.

Under the Housing Acts 135 inspections were made and 7 defective houses were made sanitary.

Temporary wooden bungalows, which were stated to be in every way sanitary, were built near the Zinc Works and were occupied by Belgian workmen.

HOUGHTON RURAL DISTRICT.

D. S. PARK, F.R.C.S., Medical Officer of Health.

Vital Statistics.		Infectious Diseases—Cases	s and	(Deaths).	
1913	5. 1914.			1915.	1914.
Estimated Population 25,08	28,367	Total notifications		292	511
Birth-rate 33.7		Smallpox		nil	nil
Death-rate (Crude) 17.0	06 16.81	Scarlet fever		85	366
Death-rate (Standardized) 17:0	00 16.75	Diphtheria		43	2 3
Zymotic death-rate · 2.9	2.99	Fevers (Enteric, &c.)		8	22
Phthisis death-rate 0.7	5 0.70	Puerperal tever		1	1
Total Tuberculosis death-rate 1.1	1 1.48	Cases treated at hospital		26	75
Respiratory diseases death-		Measles		(30)	(nil.)
rate 3.7	8 3.06	Whooping cough		(11)	(5)
Infant mortality-rate per 1,000		Diarrhea and Enteritis		` '	` ,
births	1 157	(under 2 years)		(14)	(55)

Dr. Park, after services extending over 30 years, resigned the post of Medical Officer of Health on account of failing health, and Dr. Langenberg was appointed as his successor.

The origin of the case of Enteric Fever was not discovered, and water, milk or other food was not in any case suspected. The opinion was expressed in the report that flies were probably responsible for cases of epidemic diarrhea and other diseases.

It is stated that the Health Visitor continues to do good work in supervising births and "She is judicious and tactful in the per-"formance of her somewhat delicate duties, and is well received "by the people among whom she labours." As regards the deep well water supply in the Leamside district, it is stated that the necessary protective measures which were required have been satisfactorily completed. The report deals with the water supply from a spring to about 12 houses at East Rainton. Bacteriological examination proved it to be seriously contaminated, and though steps were taken to prevent contamination, they were not successful. Dr. Langenberg says "Under the circumstances I "am of opinion that the water is not fit for drinking purposes, an "opinion which is shared by the Medical Officer of Health for the "County."

Under the Housing Acts 124 dwellings were inspected and 5 Closing Orders were made. 5 houses were made habitable after Closing Orders being made, and 32 houses were made habitable in respect of which no Closing Orders were made.

LANCHESTER RURAL DISTRICT.

T. Buckham, M.B., B.S., B.Hy., Medical Officer of Health.

Vital Statistics.		Infectious Diseases—Cases and (Deaths.	.)
1918	5. 1914.	1915.	1914.
Estimated Population 30,63	0 34,116	Total notifications 471	569
Birth·rate 29.7	0 30.48	Smallpox nil	nil
Death-rate (Crude) 14.2	3 14.24	Scarlet fever 188	288
Death-rate (Standardized) 14.7	5 14.75	Diphtheria 158	134
Zymotic death-rate 2.6	3.25	Fevers (Enteric, &c.) 7	25
Phthisis death-rate 0.8		Puerperal fever nil	nil
Total Tuberculosis death-rate 10	9 0.88	Cases treated at hospital 323	419
Respiratory diseases death-		Measles (35)	(1)
rate 2.8	4 2:14	Whooping cough (7)	(24)
Infant mortality-rate per 1,000		Diarrhea and Enteritis	(=1)
	09 141	(under 2 years) (16)	(55)

Under the Housing Acts 4 houses were closed by Order, 12 were voluntarily closed, and 7 were made habitable. The whole of the houses in the Wagtail area of Craghead have now been demolished, and in West Lane, Allendale Cottages, nearly the whole of the houses have been damaged by colliery subsidences, and many of them are not reasonably fit for human habitation.

Owing to want of pressure at Burnhope, the water supply continued to be unsatisfactory.

The back streets at Hamsterley Colliery village are stated to be in a bad condition, but the owners have promised to repair them as soon as possible.

SEDGEFIELD RURAL DISTRICT.

C. BASAN, M.D., Medical Officer of Health.

Vital Statistics.			Infectious Diseases - Cases and (Deaths).
	1915.	1914.	1915. 1914.
Estimated Population	32,398	35,968	Total notifications 392 424
Birth-rate	31.94	29:99	Smallpox nil. nil.
Death-rate (Crude)	14.47	12.45	Scarlet fever 211 253
Death-rate (Standardized)	15.24	13.11	Diphtheria 71 48
Zymotic death-rate	2.03	1.90	Fevers (Enteric, &c.) 9 24
Phthisis death-rate	0.80	0.64	Puerperal fever 1 4
Total Tuberculosis death-rate	1:32	1.22	Cases treated at hospital 180 190
Respiratory diseases death-			Measles (33)
rate	5.99	1.80	Whooping cough \dots (2) (18)
Infant mortality-rate per			Diarrhœa and Enteritis
1,000 births	130	132	(under 2 years) (16) (31)

The report states that the advice of the Health Visitor is frequently ignored, and on the question of infantile mortality it is stated "By no such organization as that of Lady Health Visitor "alone will the fringe of this great question be touched; a much "more elaborate and ambitious scheme is required, and as a minor "adjunct of it highly trained intelligent Health Visitors might be "usefully employed, but under the system at present prevailing in "your district, it is impossible for Health Visitors alone to "accomplish anything more than mere chance results."

Diphtheria was seriously prevalent, and at Ferryhill Township it was found that three unsuspected cases had been attending school.

There was a marked reduction in the number of cases of Enteric Fever notified, and several of these were found not to be suffering from the disease. Three of the cases were found among the staff and patients of the County Asylum, and one case was caused by the eating of infected mussels.

The segregation of incurable and infective cases of Tuberculosis is urged. It is stated that the after-care of patients discharged from sanatoria also leaves much to be desired.

Under the Housing Acts 141 houses were inspected. Closing Orders were made in respect of 12 houses, two of which were subsequently made habitable, whilst in 55 cases defects in dwelling houses were remedied without the making of Closing Orders.

The necessity of making up the streets at East Howle, Ferry-hill district, the Brooms, and West Cornforth is urged.

As regards the Trimdons and West Cornforth, the following quotation from the report indicates a most unsatisfactory state of affairs:—

"It would have been a pleasing duty to report more progress in the Trimdons, but arrears of work, promises unfulfilled, an apparent unwillingness on the part of the colliery owners to work expeditiously and in amicable agreement with your Council mar the retrospect of yet another year. Whilst sufficient reasons may exist at present for not pushing forward, something in the near future must be done to improve the sanitary conditions of the property in this district.

"Abolition of the ashpit-privies, provision of separate yards "wherever possible, a speeding-up of the reconstruction of the "houses at Trimdon Colliery, the addition of cement concrete pave-"ments and the making up of streets both at the Grange and the "Colliery are works of the first importance which must be grappled "with at the earliest opportunity.

"The private streets at West Cornforth are also in a deplor"able condition, to use a colloquial expression, they are bottomless
"in wet weather and a shifting mass of black germ-laden dust when
"the climatic conditions are reversed. Further improvements are
"also sadly needed in this district, and the abolition of ashpit"privies and provision of water-closets, abolition of the back-to-back
"dwelling houses rank amongst the more important ones. In
"Church Street, Coxhoe, the provision of the water carriage system
"is urgently needed, as the scavenging carts have not proper access
"to these premises."

The scavenging of the district appears to have been neglected to a serious extent by some of the contractors.

Reference is made to the unsatisfactory state of the water supply of the Trimdons, and it is stated that "Unless an adequate "and satisfactory supply can be maintained, it will be incumbent on "your Council to seek a fresh source of supply and to settle this "vexed question for all time."

SOUTH SHIELDS RURAL DISTRICT.

W. ARMSTRONG, L.R.C. P., Medical Officer of Health.

Vital Statistics.		Infectious Diseases - Cases and (Deaths).
191	5. 1914.	1915. 1914.
Estimated Population 15,45	6 16,169	Total notifications 100 177
Birth-rate 25.7	5 28.88	Smallpox nil nil
Death-rate (Crude) 12.3	5 11.50	Scarlet fever 52 92
Death-rate (Standardized) 12.6	7 11.80	Diphtheria 10 13
Zymotic death-rate 1.0	9 1.45	Fevers (Enteric, &c.) 6 18
Phthisis death-rate 0.6	4 0.49	Puerperal fever 1 2
Total Tuberculosis death-rate 1.0	9 1.17	Cases treated at hospital 41 69
Respiratory diseases death.		Measles (2) (nil.)
rate 2.0	0 1.93	Whooping cough (3)
Infant mortality-rate per		Diarrhœa and Enteritis
1,000 births 15	20 128	(under 2 years) (10) (19)

Satisfactory progress was made with the main sewerage of the district, and there were much improved conditions in the Boldon district.

Owing to the difficulty in obtaining men and to the enormous increase of work thrown on to the Council through the large number of troops coming into the district, the scavenging was not well performed.

Owing to the war nothing has yet been done to put the streets mentioned in my last annual report in a sanitary condition.

It is stated there is still a demand for houses for the working classes in the district.

A very large number of soldiers—about 12,000—were billeted in the district during the year and the District Council supervised the scavenging. A large number of articles were disinfected by steam at the request of the Army Authorities.

The appointment of a second sanitary inspector is recommended.

STOCKTON RURAL DISTRICT.

J. W. BLANDFORD, L.R.C.P., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (Deaths).
	1915	1914.	1915. 1914.
Estimated Population	11,091	11,673	Total notifications 96 105
Birth-rate	23.35	24.25	Smallpox nil nil
Death-rate (Crude)	12.44	13.02	Scarlet fever 27 49
Death-rate (Standardized)	12.55	13.13	Diphtheria 41 23
Zymotic death-rate	1.89	2.23	Fevers (Enteric, &c.) 5 9
Phthisis death-rate	0.99	0.51	Puerperal fever nil 1
Total Tuberculosis death-rate	1.26	0.68	Cases treated at hospital 42 23
Respiratory diseases death-			Measles (6) (1)
rate	1.98	1.37	Whooping cough (nil) (7)
Infant mortality-rate per 1,000			Diarrhœa and Enteritis
births	81	120	(under 2 years) (4) (9)

During the year the District Council appointed a nurse to visit Measles cases and others suffering from infectious disease, and also to look after child welfare.

Several large schemes of drainage have been postponed until after the War, but it is stated that the postponement will in no way affect the health of the district.

Building was practically at a standstill except at Haverton Hill, where a few houses were erected to replace those condemned at Port Clarence.

The scavenging of the district is stated to be generally satisfactory except at Billingham village, where there was a difficulty in obtaining suitable men.

Under the Housing Acts, 172 dwellings were inspected, but though no Closing Orders were made, notices were served in numerous instances in respect of defects. At Newton Bewley some houses are to be rebuilt as soon as conditions are normal again.

SUNDERLAND RURAL DISTRICT.

ROBERT STOBO, M.B., B.Hy., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (Deaths).
	1915.	1914.	1915. 1914.
Estimated Population	32,382	31,487	Total notifications 274 688
Birth-rate	25.72	31.06	Smallpox nil nil
Death-rate (Crude)	14.63	13.70	Scarlet fever 89 457
Death-rate (Standardized)	14.95	14.00	Diphtheria 60 81
Zymotic death-rate	2.71	2.47	Fevers (Enteric, &c.) 10 26
Phthisis death-rate	1.01	0.75	Puerperal fever nil 1
Total Tuberculosis death-rate	1.21	0.98	Cases treated at hospital 116 283
Respiratory diseases death-			Measles (7) (nil)
rate	0.83	2.03	Whooping cough \dots (6) (12)
Infant mortality-rate per			Diarrhœa and Enteritis
1,000 births	146	142	(under 2 years) (25) (39)

The figures for 1915 given above are taken from the County Medical Officers' returns.

Based on the Registrar-General's estimate of civil population, the total death-rate was 17'4, but if the population had been under normal conditions, the rate would have been 14'6.

As regards the precautions against Measles, it was arranged that the early cases of an epidemic should be personally supervised by the Medical Officer of Health, who was given permission, should the number of cases increase, to send a nurse or nurses to parishes affected where they would carry out the instructions of the patient's medical attendant but, under no circumstances would she be allowed to attend any other but Measles cases.

The number of cases of Enteric Fever notified was the lowest on record. There seems to have been no direct infection from one case to another, and there was considerable difficulty in ascertaining the source of infection. Two of the cases were possibly due to the laying of sewers in close proximity to their homes, one was supposed to be due to infected food, and one was supposed to have been imported from another town.

Since the introduction of compulsory notification, the Tuberculosis death-rate has increased considerably. It is pointed out that it is more important from a public health standpoint to isolate the advanced Tuberculosis cases than to treat the early cases in sanatoria.

One case of Cerebro-Spinal Fever was notified, the patient being a soldier home on leave.

Two cases of Acute Poliomyelitis were notified from the Parish of Ryhope.

Provision was made at the Isolation Hospital for treating soldiers encamped in the district, and 24 military cases were received during 1915. Arrangements were made by which Enteric Fever cases were sent to the Sunderland County Borough Hospital, whilst Diphtheria cases from the Borough were treated at the Rural District Hospital. At the Tuberculosis Hospital (12 beds) erected in the grounds of the Isolation Hospital, 45 patients were treated and they were all happy and contented in their treatment. It is stated that in 13 cases the disease was arrested, 16 left much improved, 4 improved, and in one case there was no improvement, whilst 3 were worse on discharge; 8 were still in hospital at the end of the year.

The scavenging is stated to have been well performed, and wherever possible the water-carriage system is being substituted for the dry system, and 29 privy-ashpits and 2 ash-closets were converted into water-closets.

Under the Housing Acts 80 inspections were made of dwellings and in 13 cases Representations were made to the Local Authority that the houses were unfit for habitation. Six Closing Orders were made and in 3 cases defects were remedied without the making of Closing Orders.

WEARDALE RURAL DISTRICT.

JAMES BANNERMAN, M.B., Medical Officer of Health.

Vital Statistics.			Infectious Diseases—Cases and (Deaths).
	1915.	1914.	1915. 1914.
Estimated Population	8,922	9,651	Total notifications 136 90
Birth-rate	19.83	18.55	Smallpox nil. nil.
Death-rate (Crude)	13.67	14.50	Scarlet fever 73 58
Death-rate (Standardized)	13.11	13.91	Diphtheria 32 14
Zymotic death-rate	(:44	0.31	Fevers (Enteric, &c.) nil. nil.
Phthisis death-rate	0.44	0.93	Puerperal fever nil. nil.
Total Tuberculosis death-rate	0.56	0.93	Cases treated at hospital 73 42
Respiratory diseases death-			Measles (1)
rate	i.90	2.28	Whooping cough (1) (nil.)
Infant mortality-rate per			Diarrhœa and Enteritis
1,000 births	50	95	(under 2 years) (nil.) (nil.)

Under the Housing Acts 150 dwellings were inspected and no Closing Orders were made. The report contains details of sanitary improvements effected to individual houses or groups or houses.

A case of Anthrax in a cow occurred in Wolsingham and the carcase was cremated and the necessary disinfection performed.

It was reported that many of the inhabitants of Cowshill, Wear-head, Ireshopeburn, St. John's Chapel, Daddryshield and Westgate throw their refuse into the streams, and that the Council have erected notices under the 47th section of the Public Health Amendment Act, 1890, in these villages as well as in Wolsingham, Boltsburn and Frosterley.

The report recommends that an isolation hospital for Enteric Fever and Smallpox should be provided.

PORT SANITARY DISTRICTS.

HARTLEPOOL PORT.

ARNOLD S. L. BIGGART, M.B., Ch.B., Medical Officer of Health.

During the year 95 patients were admitted to the Hospital of the Port Sanitary Authority. Of these all but 2 were patients from the County Borough of West Hartlepool and the Borough of Hartlepool, the 2 cases being patients from vessels arriving in the Port. The Hospital, therefore, serves the purpose of an Isolation Hospital for the two Boroughs and in addition admits an occasional case of infectious disease from vessels arriving in the Port.

Of the 95 cases, 68 were Scarlet Fever, 19 Diphtheria, 17 Typhoid and 1 Dysentery. In addition to the 2 cases of infectious disease mentioned above, who were admitted to the Hospital of the Port Sanitary Authority, 5 persons suffering from illness were removed from vessels arriving in the Port, to the Hartlepool Hospital.

The Medical Officer expresses the opinion that the Isolation Hospital suffices to meet the requirements of the district but suggests that there should be additional accommodation for the housing of the nursing staff in the portion of the Hospital set apart for the treatment of Smallpox patients.

The number of vessels inspected during the year was 1,287 and of those 33 were visited by the Medical Officer on account of sickness on board, 4 for having unsound food as cargo and one on account of the vessel having arrived from a Cholera infected port.

Special attention was given to the drinking water on the vessels and in several instances where it was found to have been taken from rivers, their water tanks were emptied and cleansed and replenished with fresh water.

Large quantities of food were landed from boats detained by the Naval Authorities and under the Unsound Food Regulations, 21 barrels of pickled beef and other food stuffs were condemned and destroyed.

RIVER TYNE PORT.

WM. EDMUND HARKER, M.D., B.S., D.Hy., Medical Officer of Health.

The number of patients admitted to the floating hospital of the Tyne Port Sanitary Authority during the year was 43 and of these 10 were either suffering from, or suspected to be suffering from, Enteric Fever. There were also 10 cases of Measles. 7 of Diarrhoea, 2 of Diphtheria and 2 of Dysentery, but no cases of Smallpox.

In the Report of the Medical Officer of Health is given an account of his inspection of 200 vessels visited by him on account of reported or suspected sickness on board. The Officers of the Port Sanitary Authority also boarded 460 vessels arriving from foreign ports infected or suspected to be infected with Cholera, Yellow Fever, Plague or Smallpox. Of these 47 came direct to the Tyne, the remainder indirectly. 2 vessels had Smallpox on the voyage; 1 case of Scarlet Fever on arrival; 19 had cases of Typhoid on the voyage and 11 on arrival; 7 had 7 cases of Diphtheria on the voyage and 3 on arrival; 12 vessels had 21 cases of Malaria on the voyage and 5 on arrival; 4 had 21 cases of Beri-Beri on the voyage and 1 on arrival; 12 had 14 cases of Measles on arrival; 10 had 5 cases of Diphtheria on the voyage and 11 on arrival; whilst 16 had 10 cases of Diarrhœa on the voyage and 10 on arrival.

EMIGRANTS.

The emigrant vessels coming into the Tyne were inspected by the Port Sanitary Authority. 749 emigrants en route to America were passed through the Port and the ports of their re-embarkation were notified.

GENERAL SANITARY WORK.

The number of vessels arriving at the Port was 11,494; of these 10,012 were inspected. Of the 10,012, 5,401 were of British nationality whilst all but 413 were either Norwegian (2,226), Danish (996), Swedish (565), or Dutch (410).

In 477 vessels structural defects were found and remedied, and in 539 instances notices were served to cleanse the peaks, forecastles, water closets and bilges of vessels which were found in a dirty condition.

The regulations under the Food Act, 1908, were also enforced and cargoes of vessels arriving in the Tyne and the Albert Edward Docks and at the Dunston Co-operative Flour Mills were inspected.

The Water Boats and the water supply to ships in port were also given attention and more particularly those arriving from ports infected or suspected to be infected with Cholera.



TABLE GIVING POPULATION, BIRTH-RATE, DEATH-RATE, &c., WITHIN THE URBAN DISTRICTS OF THE ADMINISTRATIVE COUNTY OF DURHAM.

TRBAN DISTRICTS.	Medical Officer of Health.	Area in Acres.	Population 1915 (Estimated).	Births.	Deaths	Birth-rate	Death- rate.	Zymotic death- rate.	Infant Mortality rate per 1,000 Births.	Phthisis death- rate.	Total Tubercu- losis death- rate.	Lung Diseases death- rate.	Number of Cases Notified.	Hospital accommo- dation?	Number of cases removed to Isolation Hospital.	Percentage of Notified cases removed to Isolation Hospital.	Deaths occurring within District, excluded.	occurring outside District included
BOROUGHS.																		
Durham	A. M. Vann, M.R.C.S	1066	17550	367	347	20.91	19.77	2.20	168	1:13	1:36	3.93	94	Yes.	31	52.5	82	20
Hartlepool	George Jubb, M.D., D.P.H	735	18819	546	373	29.01	19.82	1.75	93	1.43	1.86	3.40	163	Yes	35	44.8	30	61
Jarrow	J. M. Nicoll, M.B	783	33466	1036	764	30.82	22.82	3.64	150	2.06	2.09	5.46	445	Yes.			11	103
Stockton	Thomas Horne, M.D	5465	57882	1672	1065	28.88	18:39	2.40	127	1.15	1.81	3.52	564	Yes.	306	87:3	28	48
URBAN DISTRICTS.																		
Annfield Plain	W. M. Morison, L.R.O.P	3489	18000	463	273	25.72	15.17	1.88	137	1:38	2.05	2.94	187	Yes.	50	64 9	***	31
Barnard Castle	C. H. Welford, M.D	560	4206	87	93	20 68	22:11	1.66	80	0.23	1.42	4 75	145	Yes.	21	22.5	9	5
Benfieldside	Wm. Allen, M.D	1525	7560	219	135	28.96	17'82	2 91	114	1.05	1.85	3.57	280	Yes.	169	68.1	62	9
Bishop Anckland	T. A. McCullagh, M.R.C.S	691	14687	317	249	21.57	16.95	2-45	157	0.92	1:36	3.26	86	Yes.	21	33 8	56	11
Blaydon	H. Morrison, M.B., B.S., B.Hy.	9314	36327	1030	490	28.35	. 13.48	1.92	134	0.49	0.90	2.91	327	Yes.			9	39
Brandon and Byshottles	Henry Smith, M.D	6669	18935	581	326	30.83	17:32	3.85	125	0.63	0.78	3.38	107	Yes.	52	67:5	5	19
Chester-le-Street	D. Duncan, M.B.	2511	14091	389	228	27:60	16:18	3.54	126	0.78	1.13	2.69	120	Yes.	65	58.5	65	12
Consett	A. D. M. Macintyre, M.B	1005	11733	288	211	24.54	17:98	2.81	118	0.93	1.35	3.66	224	Yes.	161	80.2		30
Crook	A. Mackay, M.D	4056	12000	362	200	30.16	16 66	4.41	129	0.83	1.16	2:58	194	Yes.	118	70 2		11
Felling	Wm. E. Peacock, M.D., B.Hy.	2684	25910	755	487	29.13	18.75	2:31	123	2:31	1.38	1.81	246	Yes.	111	76.0		69
Hehhurn	E. E. Norman, M.B., B.S	1241	23580	749	375	31.76	15.90	2.12	109	1:31	1.90	3.47	283	Yes.	125	78.6	18	41
Hetton-le-Hole	J. Adamson, M.D.	1617	16300	564	286	34.60	17:55	2.20	152	1.10	2.02	2.82	328	Yes.	47	41.2		20
Honghton-le-Spring	D. S. Park, F.R.C.S	1551	10619	289	181	27.21	17:04	1.78	148	0.94	1.31	4.23	123	Yes.	27	32.9	11	5
Leadgate	. Wm. Allen, M.D	1836	4791	146	88	30.47	18.55	2.08	164	0.83	1.25	2.20	90	Yes.	60	66.6		5
Ryton	James W. Smith, M.D	5169	13256	419	176	31.60	13.27	2.64	97	0.52	1.05	1.20	162	Yes.	65	45'4	8	18
Seaham Harbour	Luke G. Dillon, M.D	1101	18700	555	308	29.67	16:47	2.56	162	1.06	1:44	4.06	73	Yes.	6	16.6		28
Shildon	. L. C. Nash, L.R.C.S	1066	12974	388	237	29.89	18:26	1.77	141	0.84	1.46	3:31	108	Yes.	61	87.1	1	12
Southwick-on-Wear	John J. Carruthers, M.B	. 856	13634	433	262	31.76	19.43	1.83	150	0.95	1.61	3.66	100	Yes	42	71.1	1	50
Spennymoor	W.Mnssellwhite, M.R.C.S., n.P.F	3388	16785	557	312	33 ·12	18.58	2.50	122	1.19	1.24	3.69	230	Yes.	107	79.7	•••	30
Stanhope	John Gray, M.B	. 216	1792	43	29	23.99	16:12	nil.	93	0.65	0.55	1.11	24	Yes.	18	78.2	5	1
Stanley	E. G. D. Benson, L.R.C.P., D.P.H	3593	28000	798	387	28.50	13:82	2.60	130	0.46	1.00	3:10	330	Yes.	206	97-1	1	36
Tanfield	E. G. D. Benson, L.R.C.P., D.P.H	4779	10935	27 2	142	24.87	12:98	0 73	132	0.73	1:37	2.01	143	Yes.	69	73.4	24	14
*Tow Law	J. H. Naismith, M.D	. 477	4304	99	6-4	23.00	14.86	0.92	141	0.53	0.46	2.78	81	Yes.			9	
Whickham	Andrew Smith, M.D	5914	18898	533	265	28:20	14.02	2.06	125	0.79	1:48	2.27	164	Yes.	73	59.2	2	46
	R. E. Brown, L.R.C.P	3793	8796	245	135	27.85	15:34	2.16	97	0.54	0.68	2.16	25	Yes.	21	84.0		9

*No report received: the above figures are taken from C.M.O.'s records



Table giving the Deaths at Certain Ages and from Certain Specified Causes within the Urban Districts of the Administrative County of Durham.

			DEA	THS AT	SUBJOIN	ED AGE	s,			1						•		=					D	DEATH	S PROM	SUBJOI	NED C	AUSES.									-	
URBAN DISTRICTS.	At all ages.	Under 1 Year,	and under 2.	and under 5.	and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and upw'rds	Enteric Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria and Croup.	Influenza.	Erysipelas.	(Pulmonary Tuberculosis).	Meningitis.	Diseases.	Cancer, Malignant Disease.	Rheumatic Fever.	itis.	Organic Heart Disease.	Bronchitis. Pueumonia (all	. Jo	ns. heea	mi m .	Circhosis of Liver.	Alcoholism.	Nephritis and Bright's Disease	Puerperal Fever.	Other accidents and Diseases of Pregnancy and Parturition.	Congenital Debility and Malformation, including Pre-	iolent Deaths, excluding	Suicide.	Other defined Diseases.	Diseases ill-defined or unknown.
Durham	347	63	28	10	20	12	37	78	99	1		21	1	7	2	2		20	2 2	,	17		,	20	10 00	1	}		1				- , .		1 2	7	1	
Hartlepool	376	51	30	25	21	16	53	91	89	2		13	2	7	3	1		27	1 7		28	2			$\begin{vmatrix} 40 & 29 \\ 32 & 32 \end{vmatrix}$	1	14	1	4	2	4	1	1	16	7	3	94	18
*Jarrow	764	156	90	56	44	36	99	123	160	1		64	1	14	8	4		1	5 16		27						9	1		•••	18		2	20	21	5	99	I
Stockton	1065	214	80	76	53	48	114	230	251			62	6	11	17	7			2 26		60	5			67 115				1		10	•••	1	38	23	3	177	9
Annfield Plain	273	63	29	16	15	13	32	38	67	1		24	1		1	2		25	4 8					- 4	06 98		44	4	12		20	3	5	81	34	4	279	12
Barnard Castle	93	7	4	4	5	3	6	23	41			2		1	3	2			3 2		12	3			27 29) -	9	1	3		11	•••	3	25	5	2	27	27
Benfieldside	135	25	12	10	18	5	15	17	33	1		2	3	1	12				5 1		12				16 4	2	1		I					2	1	3	15	1
Bishop Auckland	249	50	22	16	6	4	30	53	68	I		12	1	7		<i>o</i> 4		14	1 0		17	1			5 22		6					٠.	2	10	3	1	21	
*Blaydon	490	139	69	48	34	24	42	67	67	2		35	2	3	12	3		18	1 11		17				36 11		18		5				1	15	3		37	37
Brandon & Byshottles	326	73	38	39	13	15	33	50	65	1		58	2	5	5	3		12	2 1			2			24 82	3	20	4	2		15	1	5	46	14		127	4
Chester-le-Street	228	49	29	22	11	6	18	42	51	2		31		6	4			12			15	1			6 48	4	5	2			6	1		39	15	2	44	9
Consett	211	34	16	14	26	10	30	38	43			3	3	3	20	1		1) 0		11 .				9 19	2	12	1	1		4		2	21	5	2	42	8
Crook	200	47	25	12	13	5	8	34	56	1		19	8	5	5	1		0	3	Ι.	, ,	4			6 27		4	1	1		16		3	19	7	1	41	
Felling	418	93	51	24	24	25	41	77	83	1		23	3			4	3				11	1 .			6 15	1	21		2				2	15	6	4	27	
Hebburn	376	83	26	27	22	24	41	80	73	1		21	3	1	2	2	3 3				26			24 3		3	43	1		1 1	2		3	42	10	٠.,	49	25
Hetton-le-Hole	286	86	38	12	11	10	31	37	61	1		11		10	2	2		8			15	4			1 51	3	31			\ 1	.0			33	I5	3	65	
Houghton-le-Spring.	181	43	16	20	11	6	16	30	39	1		8	Ţ		3			^	8		13 .		- 1		2 25	2	11	•••			5		3	38	10		60	3
Leadgate	83	24	3	2	5	4	7	17	21			2			1	0				'	12	3 .			8 27	1	9	1	3	I	0			13	9		31	
Ryton	176	37	11	16	11	8	10	40	43	2		25		2	.1			_ .		,	4 .	.			6 6		7	1			3			6	4		18	
Seaham Harbour	308	90	42	21	16	10	29	52	48			17	1	4	4		1 9				12 ,				6 14		2	1	3		3 .		1	18	6	2	29	16
Shildon	237	55	24	8	9	8	26	40	67			17		3	9	7	1 20				13 .	.			3 53		26			.	. .			39	9		61	•••
Southwick-on-Wear.	262	65	30	25	13	6	21	51	51			7	- 1		3	2	1 1:				14 .			9 3		•••	3		1	.	10.7		2	25	6	1	82	2
Spennymoor	312	68	28	27	21	18	28	48	74			15		4	ð 5	2	20				9 .			3 1		1	19				8 ,		2	25	6	1	85	
Stanhope	29	4		1		I	2	7	15					*	U	-			0			2	7 2		1 31		23		2	1	3	1	5	20	11		52	23
Stanley	387	104	60	43	21 .	11	32	61	55			36	6	8	7	2	1	"	10		6 .	.,			2	1								4	1		10	•••
Tanfield	152	36	8	8	6	7	17	33	37			3	0						Ï	ı	7		0 2		2 55	8	20	I	2				4	31	10	4	50	24
Tow Law	64	14		2	3 .	1	4	21	19	1	_		,		. 1) 0	1		9	1	3 2	11/	7 15	4	1		1					6	7		22	28
Whickham	267	68	13	22	12	12	34	32	74	1		21			2		16	6 6	1 7	Ι,	4 .	,			5		3	1						5	1	I	26	
Willington	135	24	10	12	9	9	9	24	38	1		T.1		4		3 .	. 10		7		6	.		6 18 5 18	1	3 6	6				8 .	}	3	31	9	2	33	
TOTAL	8430	1865	832	616	473	357	865	1534	1888	22	5	53 4	19 11	6 1	30		6 508		_	42			00 65		-	62	409	25		8 22	2	7	52	696	263	44 I	726 28	2 - 80

The difference between the total deaths in some districts in this Table and the figures given in Table A. is due to the incompleteness of the statistics in the Annual Reports of the district Medical Officers of Health.

In a few instances the deaths and ages of residents who died outside the District were not included as they should be in L.G.B. Table III.

*No report received; the above figures are taken from C.M.O.'s records.



TABLE B.

Table giving Population. Birth-rate, Death-rate, &c., within the Rural Districts of the Administrative County of Durham.

RURAL DISTRICTS.	Medical Officer of Health.	Area in Acres.	Population 1915 (Estimated).	Births.	Deaths.	Birth-rate	Death- rate.	Zymotic death-rate.	Infant Mortality- rate per 1000 Births.	Phthisis death- rate.	Total Tubercu- losis death- rate.	Lung Diseases death- rate.	Number of Cases Notified.	Hospital accommo- dation?	Isolation	movedto	Within	occurring
Auckland	T. C. Penfold, M.B., D.P.H.	. 57334	67644	1733	965	25.61	14.26	2.42	135	0.62	1.00	2.66	661	Yes.	Hospital.	Isolation Hospital.	!	included
Barnard Castle	James C. Neligan, L.R.C.S.	79961	11378	272	198	23.90	17.40	0.52	113	0.43	0.61	2.28	85	Yes.		64.5	23	64
Chester-le-Street	J. Taylor, M.D., D.P.H	. 32109	67194	2047	1074	30.46	15.98	3.24	136	1.14	1.77	2.56	851		43	54.4		11
Darlington	Robert H. Meikle, M.B	42019	10000	210	154	21.00	15.40	0.60	119	0.60	1.20	2:30		Yes.	346	51.7	29	98
Durham	A. T. Harrison, L.S.A	30871	32528	890	481	27:36	14.78	2.70	130	0.46	0.76		76	Yes.	27	51.9	1	21
Easington	J. Arthur, L.R.C.P., D.P.H.	37018	70582	2231	1168	31.60	16.54	1.84	155	0.69		2.73	371	Yes.	90	30.5	24	39
Hartlepool	T. G. Ainsley, M.D	19090	2735	58	40	21.20	14.62	1.09	1		1:38	2.93	584	Yes.	.87	26.0	26	62
Houghton	D. S. Park, F.R.C.S	13192	25081	846	428	33.73	17:06	2.91	103	0.73	1.09	3.25	10	Yes.	3	42.8	178	2
	T. Buckham, M.B., B.S.,				120	00,0	17.00	2.91	151	0.75	1.11	3.78	292	Yes	26	15.2	5	34
	В.Ну	51151	30630	910	436	29.70	14.23	2.64	109	0.81	1.09	2.84	471	Yes.	323	84:3	57	25
edgefield	C. Basan, M.D.	45006	32398	1035	479	31.94	14:47	203	130	0.80	1.32	2.99	392	Yes.	180			
outh Shields	W. Armstrong, L.R.C.P	12073	15456	398	191	25.75	12.35	1.09	120	0.64	1.09	200		Yes.		59.4	235	18
tockton	J. W. Blandford, L.R.C.P	32013	11091	259	138	23.35	12.44	1.89	81	0.99		1.98				61.1	343	6
underland	Robert Stobo, M.B., B.Hy	6980	32382	833	474	25.72	14.63	2.71	146					Yes.	9	53.1	7	17
Veardale	James Bannerman, M.B	97753	8922	177	122	19.83	13.67	0.44				9		Yes.	73	62.7	61	65



TABLE BI

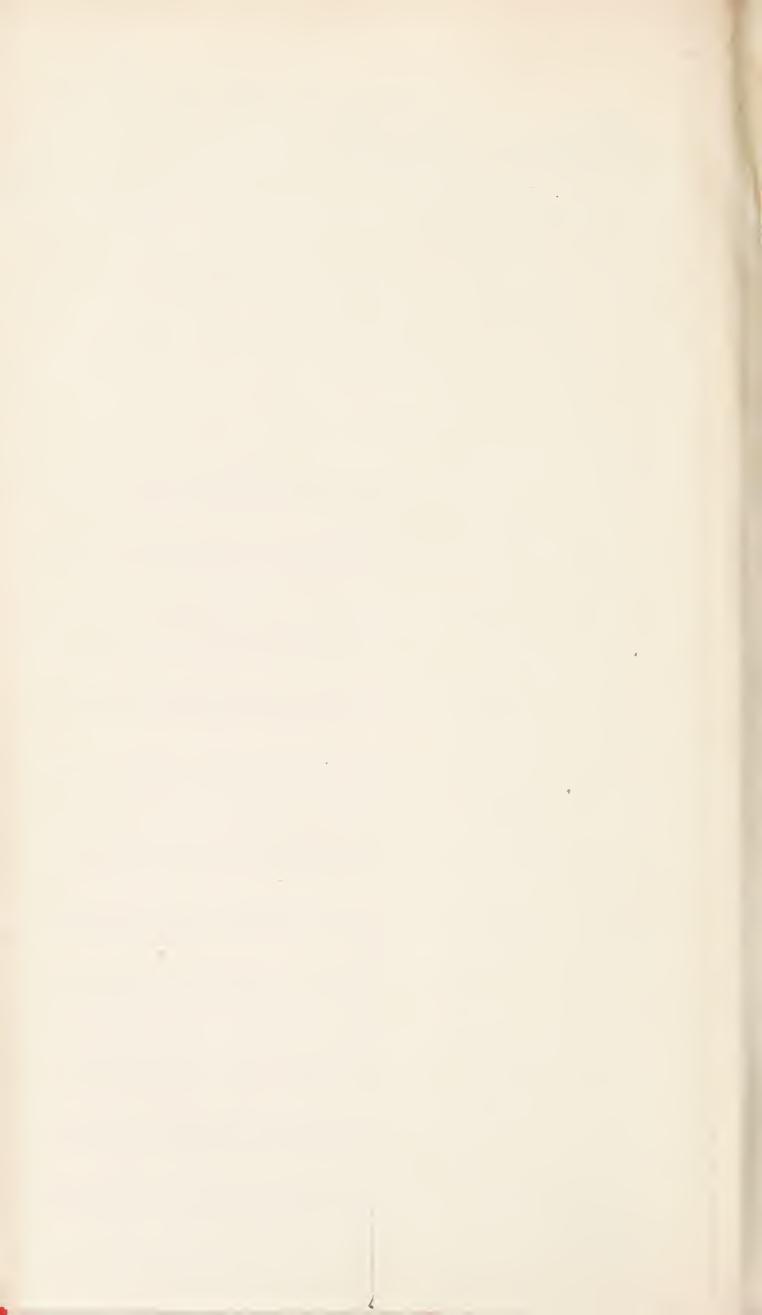
Table giving the Deaths at Certain Ages and from Certain Specified Causes within the Rural Districts of the Administrative County of Durham.

			DEAT	THS AT S	UBJOIN	ED AGE	š.													D	EATHS	PROM	SUBJ	DINED	CAUSES												
RURAL DISTRICTS.	At all ages.	Under 1 Year,	and under 2	and under 5	and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upw'rds	Enteric Fever.	Smallpox.	Measles	Fever.	Cough. Diphtheria	Croup. Influenza.	Erysipelas.	Phthisis (Pulmonary	Tuberculons Meningitis.	Other Tuberculous Diseases	Cancer, Malignant Disease.	Rhemuatic Fever.	Meningitis.	Organic Heart Disease.	Bronchitis Puennuma (all	forms). Other Diseases of Respiratory	Diarrhea and Enternis	Appendicitis and Typhlitis.	Cirrhosis of Liver.	Alcoholism.	Nephritis and Bright's disease,	Puerperal Fever.	ther accidents nd diseases of regnancy and Partnrition.	Congenital Debility and Ialformation, ncluding Pre-	Violent Deaths, excluding Suicide.	Suicide.	Other defined Diseases.	Diveases Il-defined or
Auckland	924	238	79	77	77	48	69	134	202	10		69	21	6 17	7	1	42	9	17	31	6	8	69	89	31 14	54		6		15	4	5 इ.स. ।	72	20	Ī	ī	1
Barnard Castle	198	31	7	8	7	10	21	47	67			1	1	3 1	8		5	1	1	14		3	23	20	6 6		1	3		5	2	1	18	6		33	31
Chester-le Street	1104	280	113	115	67	56	90	175	208	1		110	10 3	0 31	6		77	13	29	46	7	lõ	97	61 11	9	42	2	4	1	22	3	7	121	31	7	170	
Darlington	134	22	6	2	6	5	19	22	52	1		2		1	6		6		6	9		1	22	11 1	2	2		***		3		i	7	7	1	30	
Ourham	481	116	56	4.2	25	24	39	78	101	3		48	4	5 7	2	1	15	3	7	21	1		47	 41 4	8 5	27	4	2		12		3	47	22	2	104	
Casington	1168	346	136	91	72	50	108	172	193	3	}	91	8 1	.; 15	2	3	49	9	40	44	3	24	44 8	80 12	7 17	90	5	5	1	37	1	9	115	56		148	124
Hartlepool	40	6	2	1	6	2	4	6	13			3		.			2		ı	1	}		3	4	5	1	1		1	1			4	2		3	8
loughton	428	128	48	33	23	15	45	54	82	4		30	2 1	1 12	2		19	2	7	20	2	2	34 3	19 5	6 1	20	2	6		7	1	9	44	18	2	54	22
anchester	436	100	45	27	27	2 2	42	69	104			3 5	7 :	7 16	3	2	25	3	5	19	4	9	35 3	0 5	5	19		2		11		3	32	10		61	36
edgefield	461	135	41	44	19	24	49	75	74			33	2 2	13	4		26	6	11	10	1		3	3 64	2	19	3	3	1	7		5	40	27	3 1	113	33
outh Shields	191	48	13	7	8	15	18	37	45			2	a	2	1		10	2	5	16	2	10 1	18 1	3 18	1	12				2		2	12	3	1	56	
tockton	138	21	10	10	12	6	18	29	32	2		6	.	9	3		11	1	2	6		2	9	7 15		5)			4		2	12	8		33	1
underland	468	123	33	38	34	24	46	75	95	4	:	37	3 9	12	1	1	37	5	10	16	2	6 3	36 40	37	3	25	2		1	8 .		1	42	15	1 1	13	1
Veardale	122	9	2	3	5	5	13	33	52			1 5	2 1		1		4	1		9	2	1 1	18 9	8	1					6 .		2	6	5	1	30	14
TOTAL	6293	1603	591	498	388	306	581	1006	1320	28	46	38 60	91	135	46	8	328	55	141	262	30	81 45	55 477	655	64	316	21	31	5 14	40 1		50	572	230	26 11	105	200



INSPECTORS' REPORT-URBAN.

		DWELLI Houses	NG-	1.	BLIC	HEAL	rH AC	rs-sc	тее	S SER			NUISA	NCES	ABAT	ED.				WAT	ER, FO	DD, ANI	DRUGS		PRECAU INFRC	UTIONS .	AGAINS:	r
URBAN DISTRICTS.		SCHOOL	s.	Dairies and Milk-	Cowsheds.	Bakehouses.	Slaughter-house	Privies. Deposits of Refu	Water-closets.	Defective Yard Faving.	D	Connection frumSewers		Water Supply.	Animats	Offensive Trades	Smoke Nuisances.	Other Naisances	Totals	Samples of Water	Samples of Water	Seizmes of Лиwholesome Food	Convictions for Exposing or Selling Unwholesane Food	Lots of Infected Berkling Stoved or Destroyed	Houses Disinfected after Infectious Disease	schools Disinfected after Infections Disease.	osecutions for Ex.	pavictions for Ex.
DURHAM— Population, 17,550 Inspector of Nuisances— Robert Blythe	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice	1 18	11 50 3 11 56			3	2	36 26 9 36 26	6	11 4 10	3 1 3	5	154 4 154		3 10	1	1	S	1807 62	}		- P	1 825	2	36		7 20	0.55
HARTLEPOOL— Population, 21,130 Inspector of Nuisances— J. Charlton	Informal written Notices by Inspector Formal Notice by Order of Authority Nuisances abated after Notice	37 99 8 18	8 18 5 3 13 21		7	2	10	15	82 12	15 6	15 1 16	1	66 2 11 3 77 36	7	5 10			630 26 2 25	73	} 2		5			74	3		
JARROW— Population, 36,500 Inspector of Nuisances— John S. Call's STOCKTON—	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice	50 545	6 18	9	1	28 28		84 2 84	11 2 11	8	3	44.1	140 3 11 140 3	1	21 21		2	1383 26	2607	}		1		198	518	1		
Population, 59,311 Inspector of Nuisances— Wm. C. Crowther ANNFIELD PLAIN—	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice	18 486	23		4			·· ··· 4	50	29		3	 84 4			5		272 126		} .					373			
Population, 17,700 Inspector of Nuisances— S. L. Hetherington BARNARD CASTLE—	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice	10 10 10 10	7 3	1 1 1	8 8			0 23	12			\	20	- 1 i	5 5			28 28	157 1 157	}.		16		1	31	1		
Population, 4,872 Inspector of Nuisances— H. E. Raine BENFIELDSIDE—	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice	2 41 1 12	3 ··· 3 ···					3 3 0 3	 5 5		1 1	·	11 116 11 113						12 185 160	}				34	34			
Population, 8,500 Inspector of Nuisances— Thomas Kuox BISHOP AUCKLAND—	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice		3 1				1 30		3 1 3				$\begin{array}{ccc} 12 & \cdots \\ 6 & \cdots \\ 12 & \cdots \end{array}$	1	 1 1			1 1 1	40 56 80	}		•••		2	225			
Population, 14,687 Inspector of Nuisances— Isaac Sanderson BLAYPON—	Informal written Notices by Inspector Formal Notices by Order of Authority Nusancee abated after Notice	5 11 3 7 9	5 7				. is	0• 4 1	Q				18 2 10						76 48 80	}		•••		4	63			
Population, 36,093 Inspector of Nuisances— Robert Biggins BRANDON & BYSHOTTLES- ROSPILLES-	Formal Notices by Ordor of Authority Nuisances abated after Notice	35 35 765	36 2 21 20 2	3 3	- 1	ï	3 217 203 3 331	3 6	1 1 26 1	09 62 7	78		41 4 41 4	1 ;;	10 1 11	1 	 2 	1	2814 379 2642	}		2		266	266	5		
Population, 18,612 Inspector of Nuisances— William Ward CHESTER-LE-STREET— Population, 15,827	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abatel after Notice	1 48	5 2 1 5		5		2 114	2	1 1	20 2	3	ï	49 1 49 1		2 2	:::		30 1 28	301 3 458	}				205	65	4		
Inspector of Nuisances— William Ridley CONSETT— Population, 11,898	Transmitted abated after Motice	2 10	1 4 3 1		}	1 1	1 4	3	7 7	5 -		1 9		2 2 2	1			2 2 2	59 9 51	}.				2	125	2		
Inspector of Nuisances F. Hargreaves CROOK— Population, 12,500	Informal written Notices by Inspector Formal Notices by Order of Anthority Nuisances abated after Notice Informal written Notices by Inspector	. 1 1 1	9 2			 1	14	9	4	41		6 10	57 08 30 1		18			73	357 17 791	}		1		1	136	6		
Inspector of Nuisances— E. W. Ayton FELLING— Population, 25,910	Nuisances abated after Notice Informal written Notices by Inspector	1	8		.			2		1 2	1	i :	1 31 1 48 2					10	65 6 60 324	}				119	119	1		
Inspector of Nuisances— Henry G. Baldook HEBBURN— Population, 23,580 Inspector of Nuisances—	Nuisances abated after Notice	38 0 181 7	5				145 214		7 j	20 1	2	i 4	18 2		5			40	3 324 649	}				131	121	1		
Rt. McKellar HETTON-LE-HOLE— Population, 16,200 Inspector of Nuisances—	Nuizances abated after Notice 2	5 66	1 1 7	\	.	1 3	214	4	.	9 13	5 8	ĺ	28 5 9	1				20	1 575 228					160	165	6		
Chas. E. Butterworth HOUGHTON-LE-SPRING Population, 10,619 Inspector of Nuisances	Formal Notices by Order of Authority Nuisances shated after Notice Informal written Notices by Inspector Formal Notices by Order of Authority	2 18 8	3 1 1	1	1 .	I 3		12	18	3 2			5	 1	6			2 6	12 190 266					136	1			
J. A. Emery (Acting) LEADGATE— Population, 5,000 Inspector of Nuisances—	Nuisances abated after Notice Informal written Notices by Inspector 2 Formal Notices by Order of Authority	2 24			1 -	1		12	21 3	6 2		. 6	6 74	ï		:			13 266 120			2		67	67	2		
William Robson RYTON— Population, 14,250 Inspector of Nuisances—	Informal written Notices by Inspector Formal Notices by Order of Authority	3 6 3 19 2 35			1	. 2	V	12		6 7 8 2		2 2	7 1	1	2	.	1	4	120						76			•••
James Jenkins SEAHAM HARBOUR— Population, 18,500 Inspector of Nuisances— W. R. Robinson	Informal written Notices by Inspector Formal Notices by Order of Authority	3 49 2 2 16 1			1	. 2		12	5 2		i	4		, ï	2	. .	ï 		107 219 69 3	2	***				78			•••
8HILDON— Population, 14,103 Inspector of Nuisances— Middleton Turnbull	Informal written Notices by Inspector Formal Notices by Order of Authority	47 5	1				30 25 	1	4 1	. 11		2	[- -	:: '	1	66 122)					24	55			•••
SOUTHWIOK-ON-WEAR— Population, 14,183 Inspector of Nuisances— Walter B. Thomas	Nuisances abated after Notice	12 12						1 11	4 I 10			2;	6		7	.		24 5	56) 292)					71				
SPENNYMOOR— Population, 18,340 Inspector of Nuisances— Robert Bayles	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice	1	1	1 .			27 1 25		·· · · · · · · · · · · · · · · · · · ·			34					. .		222 }					13	179	10 .		
STANHOPE - Population, 2,000 Inspector of Nuisances- J. R. Ridley STANLEY-	Informal written Notices by Inspector Formal Notices by Order of Anthorit Nuisances abated after Notice	12		:		:	17	1	·· ·· ··			10	9						179 } 49 }						22		,	
Population, 27,300 Inspector of Nuisances— James Harris TANFIELD—	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice	34 5		.	3 3	2 1	136	4 2	i 17	7 . 2		35		1 				. 8 2	83					156	156	7		
Population, 10,800 Inspector of Nuisances— R. Heslop FOW LAW—	Informal written Notices by Inspector Fermal Notices by Order of Anthority Nuisances abated after Notice	65 4 19 2 46 4				. 1	52 5 5 2		4 25 2 12 4 25	6	i 	1 11	1 1 1					1	63 42 44	2	1				96	3		
Population 1,327 Inspector of Nuisances— W. Garraway WHICKHAM—	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice			.		.		3	9 21			,						1	95 7 6						75	4		
Population, 20,575 Inspector of Nuisances— George E lipper WILLINGTON— Population, 9,029	Nuisancee abated after Notice 16						 1		3 10			52 48	8	 1				1 1	01 86 78		.		j	135 1	35	1		
Inspector of Nuisances— John H. Gardner	luformal written Notices by Inspector Formal Notices by Order of Authority Nussances abated after Notice	31 7 123 31 7			5 1	1	112 82				55 55							. 1	93 29 43			.		23	23			
				- 1	11.				-									1		-								_



INSPECTORS' REPORT-RURAL.

	The state of the s				PUBL	лс нь	EALTE	ACT	S-NO	TICE	S SEI	RVED	AND	NUIS	ANCE	S AB	ATED				WAT	ER, FO	OD, AND	DRUGA	T	PRECA	UTIONS	AGAING	70
		Hous	LLING- SES AND	es.	ilk		. 1	e	- Se				Hous	7			- ا بد	ar ad	-	1				DILUGS	-	INFR	Tious	DISEASE	
RURAL DISTRICTS,		1	Defects.	Lodging-hous	Dairies and Mill shops.	Cowsheds.	Bakehouses.	Ashpits and	Deposits of Ref	Water-closets	Defective Yard Paving.	Defective Traps.) RAINA	GE.	Water Supply.	Pigsties.	unproperly Kep	Smoke Nuisance	Other Nuisances	OTALS.	Samples of Water	Samples of Water	8 2	Convictions for Exposing or Sellin Unwholesome Food	Lots of Infected Bedding Stoved or Destroyed	Houses Disinfected after Infectious Disease.	chools Disinfected after Infections Disease.	secutions for Ex- ure of Infected isons or Things.	avictions for Example of Infected reons or Things.
AUCKLAND— Population, 60,055		10 N				1	W	1										1	10		N. E	1 80 8	1 5	585	1	E G	Sch	Pro Per	Co. Per Pos
J. Liddle and J. D. Dowson BARNARD CASTLE—	(5 1 7 2	27 8 59 15	3 3 2			:	16	55	109 87	52 29			74 11 74		1 	2		. 1	1136 319 544	1	į		ļ	458	458	1		
Population, 11,983 Inspector of Nuisances— Robert Brown OHESTER-LE-STREET—	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice		8 11 1	J)			4 18	43	4	$\frac{1}{2}$			17 16	5 2					117 15 107	11	1		<i></i>	42	42	3		
Population, 67,194 Inspectors of Nuisances— G. B. Brown, R. J. Swad dle, and T. S. Wadge DARLINGTON—	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice												3 3	283 2							1	·	ł						
Population, 10,914 Inspector of Nuisances— Geo. L. Bowron	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice		11			1		. 19			3	14 1	î	12			1) 1	3	166									
DURHAM— Population, 32,147 Inspector of Nusances— James Mengies	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice	4	1 2		× ×	9 .		. 18	8	٠	8	6		5	2		8		1 12	81 		1			40	40	1	•••	
Population, 69,570 Inspectors of Nuisances— William Emery and G. W.	Informal written Notices by Inspector	14 5	52 26	1	1	16	2 17				82	7	20	74		4	8		63) } }					588			
Graham HARTLEPOOL— Population, 3,075	Nuisances abated after Notice Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice	10 0				10	2 1,	141	1	1	2	1		2 76 3	2	. 4	1	· / ·		63 319 21	6	6			1	57			
Inspector of Nuisances— W. Burton HOUGHTON— Population, 28,367	Nuisances abated after Notice Informal writton Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice								- 1	1	1 2 43	1 1		3	1 .	:			1 4	5 21	5		•••		***	4	3		
Inspector of Nuisances— W. Morley LANCHESTER—	The state of a state of the sta	0 10	' '		2 .		. 3	41	4		10 38	8	 1	73	3 22		5 2 5			337 103 356	6	6			243	34			
Population, 34,116 Inspectors of Nuisances— J. R. Lupton and G. W. Westgarth SEDGEFFELD—	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice	1 49	1 31 7 71		2	2 24	. 13	86 11 50	18	6			10 9 10	32 23 31					196 196	1245 408 998	} 2								
Population, 35,968 Inspectors of Nuisances— J. Stones, J. W. Tweddle, and B. Murray SOUTH SHIELDS—	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice						. 1 . 1	137 19 135	57 57	1						6			19 19	636 33 640	}					312	2		
Population, 16,169 Inspector of Nuisances— William Welsb STOCKTON—	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice	23 41 3 15 23 47	1 14 5 2 7 14		1	6 7 8	9	36 8 41	25 2 25	6	9 12 20	13	12 3 12	6	3 1 2 .		3		83 17	343	}				672	83	1		
Population, 11,673 Inspector of Nuisances— J. Franklin SUNDERLAND—	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice	1 58 16 1 69	1		4	7	1	74 21 88	2	3	49	8		67 4 71	4 3	1 5			96 10 10	392 292 48	<u></u>								
Population, 31,487 Inspector of Nuisances— Ernest Hitchen WEARDALE—	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice												1	79 1 .		2 4		1	73	.327 406 8	}		3		170	241	2		
Population, 9,651 Inspector of Nuisances— W. Morley Egglestone	Informal written Notices by Inspector Formal Notices by Order of Authority Nuisances abated after Notice													77 17 .					25	395 90 58)				6	83	3		
			-				-	10		-	1	2		10 .	-	.			20	72	J								

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